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ORIGINAL LECTURES.

THE NEW CENTURY AND THE NEW BUILDING OF THE MEDICAL SCHOOL OF HAR- VARD UNIVERSITY.

*An Oration delivered at the One Hundredth Anniversary of the
Foundation of the Medical School of Harvard
University, October 17, 1883.*

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THE Medical School of Harvard University enters, with the commencement of the present season, upon the second century of its existence. By a fortunate coincidence it takes possession at this same time of the noble edifice which a generous public has reared for the use of the teachers and students of this institution.

Yesterday; to-day; to-morrow. Let us look backward at the period when this school began its teachings, and mark some of the longer strides which bring the professional condition of the earlier epoch to that of our own. Let us see where we stand to-day, and we shall know better what to hope for the future of the teaching, the science, and the art of healing.

We are in the habit of counting a generation as completed in thirty years, but two lives cover a whole century by an easy act of memory. I, who am now addressing you, distinctly remember the Boston practitioner who walked among the dead after the battle of Bunker's Hill, and pointed out the body of Joseph Warren among the heaps of slain. Look forward a little while from that time to the period at which this Medical School was founded. Eight years had passed since John Jeffries was treading the bloody turf on yonder hill-side. The independence of the United States had just been recognized by Great Britain. The lessons of the war were fresh in the minds of those who had served as military surgeons. They knew what anatomical knowledge means to the man called upon to deal with every form of injury to every organ of the body. They knew what fever and dysentery are in the camp, and what skill is needed by those who have to treat the diseases often more fatal than the conflicts of the battlefield. They knew also, and too well, how imperfectly taught were most of those to whom the health of the whole community was intrusted.

Dr. John Warren, a younger brother of Dr. Joseph Warren who fell at Bunker's Hill, was the first mover in the project of founding a medical school in connection with Harvard College, and was the first Professor of Anatomy and Surgery. Those who remembered his teaching have spoken to me with admiration of the eloquence and enthusiasm with which he lectured. Dr. John Warren was a man of great energy, spirit, and ability. The Lectures of the newly founded school were delivered in Cambridge until the erection of the building known as the Massachusetts Medical College, in Mason Street, in the year 1815. It was no easy matter for a busy Boston practitioner to deliver a course of lectures in the University town. But Dr. Warren did not ask whether it was easy or not. "In the fulness of professional business he daily passed over Charlestown ferry to Cambridge, there not being a bridge at that time; and sometimes, when impeded by ice, was compelled to take the route through Roxbury and Brookline to Cambridge, and to return on the same morning, after himself performing the dissections and giving a lecture sometimes three hours

long." So tells us worthy Dr. Thatcher, in the Appendix to his American Medical Biography.

Benjamin Waterhouse, honorably known for having been the introducer of vaccination into America, was the first Professor of the Theory and Practice of Medicine. I remember him well, and carry the scar of the vaccination he performed on me. His powdered hair and queue, his gold-headed cane, his magisterial air and diction, were familiar to me from my boyhood. Dr. Waterhouse had his degree from Leyden, where he wrote and defended a Thesis, *De Sympathia Partium Corporis Humani, ejusque in explicandis et curandis morbis necessaria consideratione*. He had some learning, which he was disposed to make the most of, as perhaps we all are if we have it, and laid himself open to the playful sallies of the students of his time, one of whom announced a course of Lectures on Oudenology, which was supposed to be a travesty of some of his prelections.

The first Professor of Chemistry was Aaron Dexter. It was the forming period of that science. Black, Cavendish, Priestley, Lavoisier were building it up with their discoveries. A course of Chemical Lectures delivered in Boston or Cambridge at that day was probably, as it certainly was at a later day, very entertaining and not wholly uninstructional. Phlogiston had not yet definitely taken itself to the limbo of negative entities. But however crude the theories, we may be pretty sure that there was left in the student's mind a memory of startling precipitations, of pleasing changes of color, of brilliant coruscations, of alarming explosions, and above all of odors innumerable and indescribable.

It is sad to think that professors honored in their day and generation should often be preserved only by such poor accidents as a sophomore's jest or a graduate's anecdote. The apparatus of illustration was doubtless very imperfect in Dr. Dexter's time, compared to what is seen in all the laboratories of to-day. We may admire his philosophy and equanimity, therefore, in recalling the story I used to hear about him.

"This experiment, gentlemen," he is represented as saying, "is one of remarkable brilliancy. As I touch the powder you see before me with a drop of this fluid, it bursts into a sudden and brilliant flame," which it most emphatically does *not* do as he makes the contact. "Gentlemen," he says, with a serene smile, "the experiment has failed; but the principle, gentlemen,—the principle remains firm as the everlasting hills."

Three teachers only, where we have forty, or nearly that number! But when the great University of Göttingen was established, the illustrious Haller filled the one Chair of Botany, Anatomy, Surgery, and Medicine. I called it a Chair—it was rather a Settee of Professorships.

It is to be regretted that we have not a list of the text-books in use during that first period of the school. Dr. Waterhouse would naturally refer his students to the learned Gaubius, the voluminous Van Swieten, the illustrious Boerhaave. The excellent Dr. Fothergill was his uncle; the immortal Jenner was his second Creator, and their names, with that of Dr. Lettsom, were often on his lips. Sydenham, Pringle, and Cullen, he speaks of as being in the hands of all his students, and his references show a considerable extent of reading.

The text-books in Anatomy were probably Cheselden and Monro, perhaps Winslow, and, for those who could

read French, Sabatier. The Professor himself had the magnificent illustrated works of Albinus and of Haller, the plates of Cowper (stolen from Bidloo) and others. The student may have seen from time to time, if he did not own, the figures of Eustachius and of Haller. Haller's First Lines of Physiology were doubtless in the hands of most students. The works of Pott, of Sharp, and most of all of John Hunter, were taking the place of Heister and the other earlier authorities.

Smellie was probably enough the favorite in his department. What chemical text-books Dr. Dexter put into the hands of his students in 1783 I will not venture to conjecture.

And now I will ask you to take a stride of half a century, from the year 1783 to the year 1833. Of this last date I can speak from my own recollection. In April, 1833, I had been more than two years a medical student attending the winter lectures of this school, and have therefore a vivid recollection of the professors of that day. I will only briefly characterize them by their various merits; not so much troubling myself about what may have been their shortcomings. The shadowy procession moves almost visibly by me as I speak: John Collins Warren, a cool and skilful operator, a man of unshaken nerves, of determined purpose, of stern ambition, equipped with a fine library, but remarkable quite as much for knowledge of the world as for erudition, and keeping a steady eye on professional and social distinction, which he attained and transmitted: James Jackson, a man of serene and clear intelligence, well instructed, not over book-fed, truthful to the centre, a candid listener to all opinions; a man who forgot himself in his care for others and his love for his profession; by common consent recognized as a model of the wise and good physician: Jacob Bigelow, more learned, far more various in gifts and acquirements than any of his colleagues; shrewd, inventive, constructive, questioning, patient in forming opinions, steadfast in maintaining them; a man of infinite good nature, of ready wit, of a keen sense of humor, and a fine literary taste; one of the most accomplished of American physicians; I do not recall the name of one who could be considered his equal in all respects: Walter Channing, meant by nature for a man of letters, like his brothers William Ellery and Edward; vivacious, full of anecdote, ready to make trial of new remedies, with the open and receptive intelligence belonging to his name as a birthright; esteemed in his specialty by those who called on him in emergencies. The Professor of Chemistry of that day was pleasant in the lecture-room, rather nervous and excitable, I should say, and judiciously self-conservative when an explosion was a part of the programme.

Those who are curious to know what hand-books we students used in 1833 will find they were nearly as follows: In Anatomy, the works of John and Charles Bell, that of Wistar, and the Dublin Dissector. In Physiology, Haller's First Lines and Richerand. In Chemistry, Webster's edition of Brande. In Surgery, Samuel Cooper's work, with his Surgical Dictionary as a book of reference. In Theory and Practice, Dr. Good's Study of Medicine was adopted by Dr. James Jackson and generally followed. Gregory's Practice was often seen in the student's hands, and Laennec's Treatise on Diseases of the Chest and their Physical Signs was just coming to their notice in the form of Dr. Forbes' Translation. Denman and Dewees were the favorites in their special branches. Bigelow's Sequel to the Pharmacopœia was much sought after by the students of this school. Like the excellent and serviceable work recently published by his successor in the Chair of Materia Medica, it was unpretentious enough for the most scrupulous teachers of the high and dry Northern latitudes.

Other works read by students were, Hunter on the Blood, Fordyce on Fever, Heberden, and, of course, Cullen and the earlier standards which happened to be in their instructors' libraries. Louis was just beginning to be known among us. The Lectures of Sir Astley Cooper and of Mr. Abernethy were eagerly read. One fellow-student of mine read through the three solid quartos of Morgagni. These are the principal authorities I recall as lying about our study and lecture-rooms. But my memory is, no doubt, sometimes at fault.

Great stories had been reaching us for some time of the schools and hospitals of Paris. Dr. John Jackson, nephew of our old Professor, came home with news of the fine opportunities there offered. Young James Jackson, the Professor's son, was there still, writing home letters which remain on published record, to show how much of talent, and zeal, and high promise was lost to the medical profession by his early death. Especially did he speak of Louis, whom he had chosen as his principal teacher, and of whom he became the favorite pupil and the very dear friend. These circumstances decided me to seek the same centre of instruction, and so, in April, 1833, I left Boston to pursue my studies in Paris. Dr. John Jackson bade me farewell with a look as if I were indeed on my way to the good Bostonian's heaven, and handed me a small square of India-rubber, his own newly suggested pleximeter, or instrument to be used for mediate percussion, which he wished me to show to Louis and the other great Paris doctors.

I have said something of my Boston teachers, and I will devote a few words to those whose instructions I followed in Paris, and to their most renowned professional contemporaries in other European countries, at the risk of some repetition of what I have said elsewhere.

Old Boyer, Baron Boyer, who, in spite of his title, kept his own books for sale at his own house, was still creeping around the wards of La Charité. At Hôtel Dieu was the great surgeon Dupuytren. On the other side of the river was his large and loud rival, Lisfranc. Roux, best known by his report of his medical visits to England, was operating and lecturing—lecturing, parenthesis within parenthesis—ovum, germinal vesicle, germinal spot, until his embryo meaning vanished in the invisible; Velpeau, a reclaimed rustic, who, by sturdy industry, grew out of his wooden shoes into an erudite author and teacher and a celebrated practitioner; Civiale, the inventor of lithotritry; Ricord, whose mercurial temperament, to say nothing of his practice, displayed itself in his lively clinical promenades; these were some of the more famous surgical celebrities of fifty years since. Louis, Andral, Chomel, Rostan, Trousseau, Bouillaud were the best known teachers of clinical medicine. Cruveilhier was Professor of Anatomy in the École de Médecine, and Orfila, the handsome Dean of the Faculty, lectured upon some branches of medical jurisprudence.

Two or three water-logged old professors were moored to their chairs; one of them not so very old, but with a good many ancient barnacles about him, one formidable three-decker, Broussais, with his upper tier of guns still above the water-line, and banging away at the assailants of his famous "physiological doctrine." Some of the specialists I recall were Sichel, in ophthalmology, Bielt, in dermatology, Dubois, the younger, and a younger Baudelocque, inventor of a certain lemon-squeezer-like machine about as threatening to the future of the race as the invention of that other medical practitioner, Dr. Guillotin.

The works in the hands of French students were those of the great teachers and practitioners just mentioned. Jules Cloquet's Anatomy was a favorite man-

ual. Sabatier's and Maygrier's were sometimes met with. The much more extensive and thorough work of Cruveilhier was a little later to come into common use. The great work of the same author on Pathological Anatomy was of a still later date. Bourguery's magnificent, somewhat dandified Anatomy, if I may borrow this term, was in course of publication. Its showy figures were got up like opera dancers, primarily for anatomical study and secondarily for æsthetic gratification. Magendie's Physiology had replaced that of Richerand. Boyer was still a leading authority in Surgery. The name of Jean Louis Petit was frequently cited in the lectures of Marjolin, himself scarcely remembered at the present day. Bayle and Corvisart were giving place to Louis and Bouillaud. Laennec held his position as few inventors and discoverers can hope to do in the face of the after-comers who improve on their improvements.

What had been the most signal advances in the science and art of medicine between 1783 and 1833, the first half of the century we are considering?

In medical science the method of studying the human body by its constituent elements—the *General Anatomy* of Bichat—which is to common descriptive anatomy what geology is to geography, would still hold the first place if it could claim all that the microscope has done for it. It was at any rate a great onward movement, with far-reaching results for physiology and pathology.

Next to this would come the discoveries of Sir Charles Bell and Magendie of the distinct motor and sensitive functions of certain nerves and nerve-roots.

The most important practical achievement was the introduction of vaccination. I know that this practice has been and is even at the present day the subject of violent attacks and bitter prejudices. It is only very recently that our distinguished visitor—our fellow-citizen—by the female side—the Right Honorable Sir Lyon Playfair, at home alike in the laboratory of science and when presiding over the deliberations of the British House of Commons, has had to defend it—nobly and successfully he did it—in that august assembly. There is always an unconvinced and irreclaimable minority. Those who believed not Moses and the Prophets would not believe though one rose from the dead to convince them. Most of us, I feel sure, are ready to say of Jenner's discovery, borrowing some of Luther's words about justification by faith, that vaccination is a *test stantis vel cadentis medicince*.

Laennec's invention of auscultation holds the next place to vaccination in the records of practical improvement during our first half century. The recognition of the affection of the kidneys known as "Bright's disease," and the separation of the too familiar and fatal malady, diphtheria, from those with which it was long confounded, are other notable advances made during the period in question.

If we compare the two half centuries, we may balance the following improvements against each other:

Against the discovery of the double nerve function the extended knowledge of the reflex function.

Against "General Anatomy," the Cell-doctrine, due to the discoveries made by the use of the achromatic microscope, to which we also owe the discovery of the minute organisms, so important in the history of disease.

Against vaccination we may offset surgical anesthesia.

Against the stethoscope the medical thermometer.

We must divide the honors of lithotripsy and those of ovariotomy between the two periods.

The beneficent changes in the treatment of insanity, effected by the earlier labors of Pinel and Esquirol have been admirably carried on in the more recent period.

Many other and not inconsiderable improvements in

medical science and art had taken place in our first half century, as may be seen in Cuvier's Report on the Progress of the Natural Sciences. But the last fifty years have been not less richly productive. I can only indicate in the briefest manner, some few among their acquisitions.

Modern scientific chemistry is a mystery to us who were brought up in the old school of pyrotechnic experimenters. It seems to us to make over its theories and its nomenclature about once in ten or twenty years. But that may be our ignorance. We know as much as this, that our Professors teach real and most valuable practical knowledge by making the student work, and work thoroughly, in the laboratory.

Physiology is a new science, we might almost say, since the perfecting of organic analysis, the invention of the achromatic microscope, and of the numerous instruments of precision which record the vital actions and conditions.

Anatomy has added the more exact study of regions and of sections to its earlier methods of investigation.

Operative surgery has of late years achieved its greatest triumph in the establishment of abdominal section as a legitimate and safe operation. First employed by an American surgeon, Dr. McDowell, of Kentucky, in 1809, in the hands of Spencer Wells and his contemporaries it has rescued and is rescuing hundreds of lives. Tenotomy by subcutaneous section is another new and valuable operation. Plastic surgery has learned to patch deformities as a skilful housewife patches a garment. Limbs which would have been sacrificed are saved by improved methods of dressing, especially by the use of antiseptics. Resection of joints or of portions of the shaft of a bone has in many cases taken the place of amputation. Let me not forget the operation of paracentesis with aspiration of the thorax in acute pleurisy, as first practised by Dr. Henry Ingersoll Bowditch and Dr. Morrill Wyman. But enough has been said to show that the last half of our century has justified itself for existing. I shall return to some of these matters when speaking of the new edifice where they are to be the subjects of instruction.

In the prevention of disease the gain has been extraordinary. The germ-theory, alluded to as one of the results of the perfecting of the microscope, has done much to account for the phenomena of many diseases and to indicate the means of arresting their development. The recognition of domestic malaria as the frequent source of disease is of vast importance. The phrase "drain fever" has saved hundred of lives.

It is harder to speak of medical practice—the treatment of internal diseases, fevers, visceral inflammations and the like. The practice of drugging for its own sake, the fatal bequest of the English apothecary, or "general practitioner," whose profit was made on his medicines, had infected the medical profession of this country, as I believed, when some twenty and more years ago in guarded terms, often misquoted, I denounced it somewhat too epigrammatically for some of my friends of the Massachusetts Medical Society. Professor Gairdner of the University of Glasgow has recently used language much plainer than my innocent allusion to the probable effect of sinking a cargo of miscellaneous drugs among the fishes. It has been objected, he says, "that the Scottish graduate in medicine was not sufficiently conversant with the details of compounding and dispensing powders, and pills, and mixtures, and above all draughts (at 2s. 6d. a piece) to be taken two, three, four, or five times a day; in other words, that he had not sufficiently mastered the technical details by which his neighbor, the English apothecary, was able to accomplish the great ideal of the 'surgery-boy' type—the dispensing of immense quantities of 'physic' in the most complicated prescriptions,

to pass unquestioned down the willing throats of Her Majesty's lieges."

There can be little doubt that the practice thus originating influenced the whole professional public of England to a very considerable extent, and through that public introduced the over-drugging system into her colonial dependencies and the States which some of these became. However this may be, great changes have taken place within the later decades of my remembrance in the practice of medicine. Bleeding is an almost unknown operation. Of the four great remedies of Dr. Holyoke's and Dr. James Jackson's time, antimony has fallen from grace, and calomel, instead of being next the apothecary's right hand, as the letter *e* is to the printer's, has gone to an upper shelf, where it may be supposed to repent of its misdeeds like Simeon Stylites. Cotton Mather had said a century and a half ago, "I am not sorry that antimonial emetics begin to be disused." He had said too, more rhetorically, "Mercury, we know thee: but we are afraid thou wilt kill us too, if we employ thee to kill them that kill us." This was a lively way of putting a thought long afterward made into a famous saying.

While old drugs and old methods have become obsolete, new drugs and new methods have come in to take their place. The first aphorism of Hippocrates, "Life is short, art is long," and so on, is a glittering generality. The second aphorism is one of daily practical application, never to be forgotten. "Not only must the physician attend properly to his own duties, but he must see that the patient, the attendants, and all the external conditions are properly ordered." As the over-employment of drugs gives way to juster views, the hygienic conditions and personal attendance on the patient are likely to be better cared for. The less the patient is annoyed with over-medication—painful and disgusting remedies—the more tractable he is likely to be, and the less likely to throw his medicine out of the window, where it will kill the chickens instead of the fishes. The more attention is likely to be paid to air and cleanliness and comfort, the more to the kind of nourishment and the modes and times of giving it. In proportion as the work of the apothecary diminishes the cares of the nurse are called upon to render disease endurable by all the arts known to a skilful attendant. Little things mean a great deal in the sick-room. "Will you have an orange or a fig?" said Dr. James Jackson to a fine little boy now grown up to goodly stature, and whom I may be fortunate enough to recognize among my audience of to-day. "A fig," answered Master Theodore, with alacrity. "No fever there," said the good Doctor, "or he would certainly have said an orange."

Now it is just in these little unimportant, all-important matters that a good nurse is of incalculable aid to the physician. And the growing conviction of the importance of thorough training of young women as nurses, is one of the most hopeful signs of medical advancement. So much has been done and is doing that the days of the Sairey Camps and Betsey Prigs are numbered. I cannot help saying in this connection that the Registry of Nurses fortunately connected with the Boston Medical Library, itself of comparatively recent formation, is a blessing to our community which can hardly be over-estimated. What is there in the hour of anguish like the gentle presence, the quiet voice, the thoroughly trained and skilful hand of the woman who was meant by nature and has been taught by careful discipline to render those services which money tries to reward but only gratitude can repay? I have always felt that this was rather the vocation of women than general medical and especially surgical practice. Yet I myself followed a course of lectures given by the younger Madame Lachapelle in Paris, and if here and

there an intrepid woman insists on taking by storm the fortress of medical education, I would have the gate flung open to her as if it were that of the citadel of Orleans and she were Joan of Arc returning from the field of victory.

I have often wished that disease could be hunted by its professional antagonists in couples,—a doctor and a doctor's quick-witted wife making a joint visit and attacking the patient,—I mean the patient's malady, of course,—with their united capacities. For I am quite sure that there is a natural clairvoyance in a woman which would make her as much the superior of man in some particulars of diagnosis as she certainly is in distinguishing shades of color. Many a suicide would have been prevented if the doctor's wife had visited the victim the day before it happened. She would have seen in the merchant's face his impending bankruptcy while her stupid husband was prescribing for his dyspepsia and endorsing his note; she would recognize the lovelorn maiden by an ill-adjusted ribbon—a line in the features,—a droop in the attitude,—a tone in the voice,—which mean nothing to him, and so the brook must be dragged to-morrow. The dual arrangement of which I have spoken is, I suppose, impracticable, but a woman's advice, I suspect, often determines her husband's prescription. Instead of a curtain lecture on his own failings he gets a clinical lecture,—on the puzzling case, it may be, of a neighbor suffering from the complaint known to village nosology as "a complication of diseases," which her keen eyes see into as much better than his as they would through the eye of a small-sized needle. She will find the right end of a case to get hold of, and take the snarls out as she would out of a skein of thread or a ball of worsted which he would speedily have reduced to a hopeless tangle.

I trust I have not dwelt too long on this point, which grew out of my consideration of the great change that has so largely substituted the careful regulation of all the conditions surrounding the patient for the drugging system derived from the practice of the English "Apothecaries." Like the Father of Medicine in the aphorism which I have quoted, we consider attention to these conditions entitled to precedence relatively to all active interference with the course of disease.

Yet we must not be ungrateful to the pharmacist for the useful agents, old and new, which he puts in our hands. Opium and cinchona appear in our modern pharmacopœia with all their virtues, but freed by chemical skill of the qualities which most interfered with their utility. Mercury is no longer considered a panacea, but it is still trusted for important special services. Most of the remedial plants have yielded their essential principles to chemical analysis and have got rid of the useless portions which made them bulky and repulsive. Iodine, bromine, salicine in their various compounds have, within the present century, conferred inestimable aid in the treatment of some of the most formidable diseases. Many other new remedies, such as carbolic acid, glycerine, chloral, have been added to the list of those which are of daily use in combating particular symptoms, or are adapted to certain exceptional conditions. The method of administering remedies by inhalation has been greatly extended, and the admirable invention of the process of subcutaneous injection—a method, I may remark, tried upon himself and made the subject of a thesis by the late Dr. Enoch Hale, a graduate of this school—has become next to etherization, the most rapid and potent means of subduing pain and other forms of suffering. I need not speak of medical electricity, which has proved so serviceable in the treatment of nervous and muscular affections.

I despair of enumerating all the improvements which

have been effected in the various specialties into which the practice of medicine has become subdivided within these twenty or thirty years. The ophthalmoscope, the improved ear speculum, the rhinoscope, the laryngoscope—hold out their mirrors to enlighten us, or open their mouths to proclaim their own value. Diagnosis has reached a wonderful degree of accuracy; prognosis has become a terrible kind of second-sight which is not always handled carefully enough; treatment gains a little with every decade. The history of therapeutics records a succession of marches and counter-marches, with a slight onward movement as the total result of every completed revolution; slight, but precious to humanity.

I cannot pass over the most encouraging fact of the growth of medical libraries. We have a right to congratulate ourselves on the prosperity of that which has sprung into existence in this city within the last few years. It seems to me to mark the beginning of a new era in the medical history of the city. But what can I say of the immense library formed, but always forming, at Washington, and how can I sufficiently praise the work of Dr. Billings and his associates, one of the results of which comes before us in that colossal catalogue which is one of the best proofs of the advancing civilization of the great republic?

It was time for the Medical School of Harvard University—of that Institution of which Massachusetts must always be proud so long as she has anything to be proud of—it was time for this school to plant its chief edifice in a fairer position, and erect it on a broader foundation than those with which it has been so long obliged to be contented. Let us not be ungrateful to the memory of our earlier benefactors; to the State for the grant which proved of such value in its time; to the individuals who gave land and money when the former buildings were constructed. But the little Mason Street building was long ago outgrown, and that which succeeded it had in turn become wholly insufficient for the needs of the school.

You will pass from beneath this hospitable roof to the new edifice, in which, as we trust, many successive generations of medical students are to receive a large part of their instruction. As you enter its doors, as you survey its halls and lecture-rooms, its laboratories and their appliances, some of you may be ready to exclaim, What! All this to teach a student to cut off a limb or administer a potion?

The question is a natural one, and the answer is easy. The Art of Healing is supported, advanced, illuminated, by the various kinds of knowledge which are recognized as belonging to the Science of Medicine. And the Science of Medicine, like all other kinds of classified knowledge, is best taught, most easily and thoroughly learned, when taught systematically, because facts are most clearly perceived and most firmly retained in the memory when presented in their serial relations. The teaching of the various branches included in a complete medical course requires ample provision for its multiplied exigencies.

You will enter or look into more amphitheatres and lecture-rooms than you might have thought were called for. But if you knew what it is to lecture and be lectured to in a room just emptied of its preceding audience, you would be thankful that any arrangement should prevent such an evil. The experimental physiologists tell us that a bird will live under a bell-glass until he has substituted a large amount of carbonic acid for oxygen in the air of the bell-glass. But if another bird is taken from the open air and put in with the first, the new-comer speedily dies. So when the class I was lecturing to was sitting in an atmosphere once breathed already, after I have seen head after head gently declining and one pair of eyes

after another emptying themselves of intelligence, I have said, inaudibly, with the considerate self-restraint of Musidora's rural lover—

Sleep on, dear youth; this does not mean that you are indolent, or that I am dull; it is the partial coma of commencing asphyxia.

You will see extensive apartments destined for the practical study of chemistry and of physiology. But these branches are no longer studied as of old by merely listening to lectures. The student must himself perform the analyses which he used to hear about. He must not be poisoned at his work, and therefore he will require a spacious and well-ventilated room to work in. You read but the other day of the death of an esteemed fellow-citizen from inhaling the vapors of a broken demijohn of a corrosive acid. You will be glad to see that every precaution is taken to insure the safety and health of our students.

Physiology, as now studied, involves the use of much delicate and complex machinery. You may remember the balance at which Sanctorius sat at his meals, so that when he had taken in a certain number of ounces the lightened table and more heavily weighted philosopher gently parted company. You have heard, perhaps, of Pettenkofer's chamber, by means of which all the living processes of a human body are made to declare the total consumption and product during a given period. Food and fuel supplied; work done. Never was the human body as a machine so understood; never did it give such an account of itself as it now does in the legible handwriting of the cardiograph, the sphygmograph, the myograph, and other self-registering contrivances, with all of which the student of to-day is expected to be practically familiar.

I do not see any room marked on the plan of the new building as intended especially for the use of the microscope. But that a proper apartment will be assigned to this use I feel assured. I have referred to the modern achromatic microscope as having created a new era in Medical Science. I have no time to tell what it has done for Anatomy, Physiology, and Pathology, besides its great services in other departments of knowledge. But to those who have never seen its miracles I can give an illustration, which they will find it hard to believe I did not borrow from some new Gulliver's Travels or from some Jules Verne's imagination. Yet what I shall say is the simplest truth in the world to any microscopic expert, and may be easily verified by any sceptic.

If we had to examine the structure of a human body by the naked eye,—or, as I will venture to call it, *gymnoscopic* or rather *gymnopic* inspection,—it would make a great difference whether our subject were of the natural dimensions or whether he were a Lilliputian, or a Brobdingnagian. We should lose sight of many particulars in the structure of the Lilliputian which we easily detect in a man of the natural size. We should find many things plain enough in the Brobdingnagian which we do not notice in the man of ordinary dimensions on account of their minuteness. Thus, for instance, we should find that man is shingled all over, or tiled, if you will—covered with scales, more literally, just as a serpent is. The statue of Liberty, the arm of which the cast in the square at New York has made familiar to us, the statue of Carlo Borromeo at Milan, that of Bavaria, or the new statue of Germania, any one of these changed to flesh and blood would be a great source of knowledge to a gymnopic anatomist. You will observe that the naturalist could examine only a small portion of one of these colossal figures at a time. Of course the same thing is true of the microscopic man I am going to describe. He must be examined in small fragmentary portions.

The individual from whom we will suppose the por-

ion under examination to have been taken was, we will say, of short stature; a little more than five feet two inches in height, and weighing one hundred and twenty pounds. Our microscope, a rather powerful, but not extraordinarily powerful one, magnifies a thousand diameters. This fragment, then, thus magnified, represents an individual just one mile in height. He would ten times overtop the loftiest of the pyramids; twenty times the tallest of our steeples. He could bestride our good city from Long Wharf to Charles Street. His breadth and thickness being in proportion to his height, his weight would be one hundred and twenty thousand million pounds, equal to sixty million tons. He could take our State House up as we should lift a paving stone and fling it into the waters beyond Boston Lighthouse—cleaning out that palace of the people by a summary process quicker than the prætorian bands of Domitian or Commodus would have cleaned out a Roman Senate Chamber that dared to have an opinion of its own. Such is the microscopic man as we see him piecemeal in that wonderful instrument. It is the telescope of the microcosm—the master-key to the portals of a new universe, and the student must be carefully taught how to use it.

Among the various apartments destined to special uses, one will be sure to rivet your attention; namely, the Anthropotomic Laboratory, known to plainer speech as the Dissecting-Room. The most difficult work of a medical school is the proper teaching of practical anatomy. The pursuit of that vitally essential branch of professional knowledge has always been in the face of numerous obstacles. Superstition has arrayed all her hobgoblins against it. Popular prejudice has made the study embarrassing and even dangerous to those engaged in it. The surgical student was prohibited from obtaining the knowledge required in his profession, and the surgeon was visited with crushing penalties for want of that necessary knowledge. Nothing is easier than to excite the odium of the ignorant against this branch of instruction and those who are engaged in it. It is the duty and interest of all intelligent members of the community to defend the anatomist and his place of labor against such appeals to ignorant passion as will interfere with this part of medical education, above all, against such inflammatory representations as may be expected to lead to midday mobs or midnight incendiarism.

The enlightened legislation of Massachusetts has long sanctioned the practice of dissection, and provided means for supplying the needs of anatomical instruction, which, managed with decent privacy and discretion, have served the beneficent purpose intended by the wise and humane law-givers, without doing wrong to those natural sensibilities which are always to be respected.

During the long period in which I have been a Professor of Anatomy in this Medical School I have had abundant opportunities of knowing the zeal, the industry, the intelligence, the good order and propriety with which this practical department has been carried on. The labors superintended by the Demonstrator and his assistants are in their nature repulsive, and not free from risk of disease, though in both these respects modern chemistry has introduced great ameliorations. The student is breathing an air which unused senses would find insufferable. He has tasks to perform which the chambermaid and the stable-boy would shrink from undertaking. We cannot wonder that the sensitive Rousseau could not endure the atmosphere of the room in which he had begun a course of anatomical study. But we know that the great painters, Michael Angelo, Leonardo, Raphael, must have witnessed many careful dissections, and what they endured for art, our students can endure for science and humanity.

Among the large number of students who have worked in the department of which I am speaking during my long term of service,—nearly two thousand are on the catalogue as graduates,—there must have been some who were thoughtless, careless, unmindful of the proprieties. Something must be pardoned to the hardening effect of habit. Something must be forgiven to the light-heartedness of youth, which shows itself in scenes that would sadden and solemnize the unseasoned visitor. Even youthful womanhood has been known to forget itself in the midst of solemn surroundings. I well remember the complaint of Willis, a lover of the gentle sex, and not likely to have told a lie against a charming young person; I quote from my rusty memory, but I believe correctly:

She trifled I ay, that angel-maid—
She trifled where the dead was laid.

Nor are older persons always so thoughtful and serious in the presence of mortality as it might be supposed they would show themselves. Some of us have encountered Congressional committees attending the remains of distinguished functionaries to their distant place of burial. They generally bore up well under their bereavement. One might have expected to find them gathered in silent groups in the parlors of the Continental Hotel or the Brevoort House; to meet the grief-stricken members of the party smileless and sobbing as they sadly paced the corridors of Parker's, before they set off in a mournful and weeping procession. It was not so; Candor would have to confess that it was far otherwise; Charity would suggest that Curiosity should withdraw her eye from the key-hole; Humanity would try to excuse what she could not help witnessing; and a tear would fall from the blind eye of Oblivion and blot out their Hotel-bills forever.

You need not be surprised, then, if among this large number of young men there should have been now and then something to find fault with. Twice in the course of thirty-five years I have had occasion to rebuke the acts of individual students, once in the presence of the whole class, on the humane and manly sympathy of which I could always safely rely. I have been in the habit of considering myself at liberty to visit the department I am speaking of, though it had its own officers; I took a part in drawing up the original regulations which governed the methods of work; I have often found fault with individuals or small classes for a want of method and neatness which is too common in all such places. But in the face of all peccadilloes and of the idle and baseless stories which have been circulated, I will say, as if from the chair which I no longer occupy, that the management of the difficult, delicate, and all-important branch committed to the care of a succession of laborious and conscientious Demonstrators, as I have known it through more than the third of a century, has been discreet, humane, faithful, and that the record of that department is most honorable to them and to the classes they have instructed.

But there are better things to think of and to speak of than the false and foolish stories to which we have been forced to listen. While the pitiable attempt has been making to excite the feelings of the ignorant against the School and the University, hundreds of sufferers throughout Christendom—throughout civilization—have been blessing the name of Boston and the Harvard Medical School as the source from which relief has reached them for one of the gravest injuries, and for one of the most distressing of human maladies. I witnessed many of the experiments by which the great surgeon who lately filled a chair in Harvard University has made the world his debtor. Those poor remains of mortality of which we have heard so much

have been of more service to the human race than the souls once within them ever dreamed of conferring. Dr. Bigelow's repeated and searching investigations into the anatomy of the hip-joint showed him the band which formed the chief difficulty in reducing dislocations of the thigh. What Sir Astley Cooper and all the surgeons after him had failed to see, Dr. Bigelow detected. New rules for reduction of the dislocation were the consequence, and the terrible pulleys disappeared from the operating amphitheatre.

Still more remarkable are the results obtained by Dr. Bigelow in the saving of life and the lessening of suffering in the new method of operation for calculus. By the testimony of those renowned English surgeons, Sir Henry Thompson and Mr. Erichsen, by the award to Dr. Bigelow of a sexennial prize founded by the Marquis d'Argenteuil, and by general consent, this innovation is established as one of the great modern improvements in surgery. I saw the numerous and patient experiments by which that priceless improvement was effected, and I cannot stop to moan over a scrap of integument, said to have been made imperishable, when I remember that for every lifeless body which served for these experiments a hundred or a thousand living fellow-creatures have been saved from unutterable anguish, and many of them from premature death.

You will visit the noble hall soon to be filled with the collections left by the late Professor John Collins Warren, added to by other contributors, and to the care and increase of which the late Dr. John Jackson of precious memory gave many years of his always useful and laborious life. You may expect to find there a perfect golgotha of skulls, and a platoon of skeletons, open to the sight of all comers. You will find portions of every human organ. You will see bones softened by acid and tied in bow-knots; other bones burned until they are as light as cork and whiter than ivory, yet still keeping their form; you will see sets of teeth from the stage of infancy to that of old age, and in every intermediate condition, exquisitely prepared and mounted; you will see preparations that once formed portions of living beings now carefully preserved to show their vessels and nerves; the organ of hearing exquisitely carved by French artists; you will find specimens of human integument, showing its constituent parts in different races; among the rest, that of the Ethiopian, with its cuticle or false skin, turned back to show that God gave him a true skin beneath it as white as our own. Some of these specimens are injected to show their bloodvessels; some are preserved in alcohol; some are dried.

There was formerly a small scrap, said to be human skin, which had been subjected to the tanning process, and which was not the least interesting of the series. I have not seen it for a good while, and it may have disappeared, as the cases might happen to be open while unscrupulous strangers were strolling through the Museum. If it has, the Curator will probably ask the next poor fellow who has his leg cut off for permission to have a portion of its integument turned into leather. He would not object, in all probability, especially if he were promised that a wallet for his pocket, or a slipper for his remaining foot, should be made from it.

There is no use in quarrelling with the specimens in a museum, because so many of them once formed a part of human beings. The British Government paid fifteen thousand pounds for the collection made by John Hunter, which is full of such relics. The Hunterian Museum is still a source of pride to every educated citizen of London. Our foreign visitors have already learned that the Warren Anatomical Museum is one of the sights worth seeing during their stay among us. Charles Dickens was greatly interested in

looking through its treasures, and that intelligent and indefatigable hard worker, the Emperor of Brazil, inspected its wonders with as much curiosity as if he had been a Professor of Anatomy. May it ever remain sacred from harm in the noble hall of which it is about taking possession! If violence, excited by false outcries, shall ever assail the treasure-house of anthropology, we may tremble lest its next victim shall be the home of art, and, ignorant passions once aroused, the archives that hold the wealth of literature perish in a new Alexandrian conflagration. This is not a novel source of apprehension to the thoughtful. Education, religious, moral, intellectual, is the only safeguard against so fearful a future.

To one of the great interests of society, the education of those who are to be the guardians of its health, the stately edifice which opens its doors to us for the first time to-day is devoted. It is a lasting record of the spirit and confidence of the young men of the medical profession, who led their elders in the brave enterprise, an enduring proof of the liberality of the citizens of Boston and of friends beyond our narrow boundaries, a monument to the memory of those who, a hundred years ago, added a School of Medicine to our honored, cherished, revered University, and to all who have helped to sustain its usefulness and dignity through the century just completed.

It stands solid and four-square among the structures which are the pride of our New England Venice—our beautiful metropolis, won by well-directed toil from the marshes and creeks and lagoons which were our inheritance from nature. The magnificent churches around it let in the sunshine through windows stained with the pictured legends of antiquity. The student of nature is content with the white rays that show her just as she is; and if ever a building was full of light—light from the north and the south; light from the east and the west; light from above, which the great concave mirror of sky pours down into it; this is such an edifice.

The halls where Art teaches its lessons and those where the sister Sciences store their collections, the galleries that display the treasures of painting and sculpture, are close enough for agreeable companionship. It is probable that in due time the Public Library with its vast accumulations will be next-door neighbor to the new domicile of our old and venerated institution. And over all this region rise the tall land-marks which tell the dwellers in our streets and the traveller as he approaches that, in the home of Science, Arts, and Letters, the God of our Fathers is never forgotten, but that high above these shrines of earthly knowledge and beauty are lifted the towers and spires which are the symbols of human aspiration ever looking upward to Him, the Eternal, Immortal, Invisible.

ORIGINAL ARTICLES.

REPORT OF A POST-MORTEM EXAMINATION IN A CASE OF RECURRENT HIP-DISEASE,

IN WHICH SUBCUTANEOUS OSTEOTOMY HAD BEEN
SUCCESSFULLY PERFORMED EIGHT MONTHS
BEFORE DEATH.

BY H. R. WHARTON, M.D.,

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THE case from which the specimen represented in the accompanying drawing was taken was one of coxalgia, presenting marked angular deformity,

which was relieved by a subcutaneous section of the femur below the lesser trochanter.¹

The patient, James C., aged nine years, was admitted to the Children's Hospital, July 31, 1882, suffering from coxalgia of the right hip which had been subjected to no treatment for some months before his admission to the hospital. The right thigh was found much contracted upon the pelvis, and adducted; he also suffered severe pain upon the slightest attempt to straighten the affected limb. He was treated by extension, and at the same time constitutional remedies were administered. His general condition improved markedly, but the faulty position of the limb still persisted, so that, as the active symptoms of the disease had disappeared, it was thought best to remedy this malposition by a subcutaneous division of the femur.

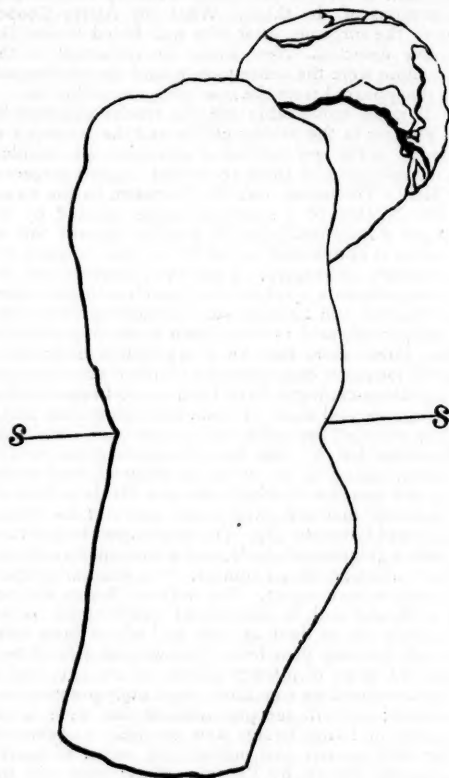
This operation I performed on November 25, 1882, and it was followed by a very satisfactory result in correcting the deformity. The patient, as soon as the union was firm at the seat of section of the bone, was allowed to get out of bed and walk about with the aid of a high shoe on the foot of the affected limb.

One morning, some months after the operation, the nurse, in dressing the boy, noticed a swelling in the neighborhood of the great trochanter of the affected limb, and called the attention of the house-surgeon to it, who discovered a large abscess, which, as it was pointing, he opened.

From this time, the patient grew rapidly worse. Abscesses formed at various points, above Poupart's ligament, in the right lumbar region just above the ilium, and a spontaneous dislocation of the head of the bone occurred backward on the dorsum of the ilium, and he finally died on August 15th from exhaustion. A post-mortem examination of the diseased hip-joint revealed the head of the bone lying upon the dorsum of the ilium, and surrounded by pus; the head of the femur was carious superficially at points, but a portion of the articular cartilage remained healthy in appearance; the change in the neck of the bone was not marked. The most extensive signs of disease were found in the acetabulum, which was entirely denuded of articular cartilage, was carious, and communicated with the cavity of the pelvis. The union of the femur at the seat of section was found firm, and the deformity resulting from the operation was slight, as can be seen by examining the accompanying wood-cut:

The history of the above case, together with the wood-cut of the specimen, is, I think, of peculiar interest, not only from the fact that I believe it to be the only specimen so far obtained showing the condition of the femur after a subcutaneous section with Adams's saw, for the patients who do badly after this operation generally die rapidly from exhaustion following the profuse suppuration, which interferes with union of the bone at the point of section, but also because it plainly shows that the operation recommended by Mr. Gant—section of

the femur below the lesser trochanter—which was the one performed in this case, is one which is followed by very slight deformity at the seat of operation.



Upon this latter point, it must be acknowledged, some diversity of opinion exists, especially among English surgeons, some of whom state that Gant's operation merely substitutes one deformity for another; but an examination of the specimen will, I think, give the most important evidence upon this point, for it will be seen that the deformity resulting from the operation is very slight.

A question which might with propriety be asked is, Had the operation any direct connection with the final result of the case? I think not, for the wound of operation healed kindly; the patient was able to walk about, and was much improved in his general condition. The specimen shows firm union at the seat of section; the head and neck of the bone show little evidence of disease, and the most marked lesions are confined to the acetabulum and pelvis, whose indirect connection with the seat of operation would certainly negative any causal relation.

The symptoms of acute osteitis which so suddenly supervened in this case can be traced, I think, to a fall upon the diseased hip, which the boy acknowledged he had received while at play in the play-room, and of which he said nothing at the time,

¹ Cases of Subcutaneous Osteotomy, AMERICAN JOURNAL OF THE MEDICAL SCIENCES, July, 1883.

fearing it would necessitate his being confined to bed.

This case, although most unfortunate in its termination, has, I think, a very direct bearing upon that mooted point, the position at which to divide the femur, and seems to show that Mr. Gant's modification of Adams's operation is one that may be undertaken with a reasonable assurance of success as regards the correction of the deformity following certain cases of coxalgia.

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THE SIMULTANEOUS OCCURRENCE OF CHANCROID AND CHANCRE

BY JOHN FERGUSON, M.A., M.D., L.R.C.P.,

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THAT chancroid and the initial lesion of syphilis can occur at the same time in a person who has exposed himself has been both asserted and denied. The following very brief account of a case, of the genuineness of which there is no doubt from the circumstances, will set the possibility of this dual occurrence beyond doubt.

Mr. J. C., a student, who has been known to me for years, and on whose word the utmost reliance could be placed, called on me one morning and remarked that he thought he had been "caught." He told me that three nights ago he had gone out with another young man and that they had visited "two houses." He told me that he had never been with a woman previously to the night mentioned. This I can fully believe. That he never was out again I know for a fact myself.

When I saw him first there was considerable irritation, and by the end of a week from the date of his exposure a well-marked chancroid. I ordered him to remain in his room, perfectly quiet, which he did, and gave him a wash consisting of sod. bibor. 3j, glycerini 3ij, aquam ad 3iv. With this he was told to sponge the sore often, and in the intervals to keep a pledget of cotton-wool, soaked in the lotion, applied. This went on well, and by the end of four weeks his chancroid could be regarded as really healed.

Some five or six days from the date of his last call upon me regarding his local sore he came again, and stated that he thought he felt a hard nodule on the opposite side of the penis, just behind the glans. This initial sore gradually took on the characters of the indolent ulcer, with a hard, widely extended base. In due time the inguinal glands enlarged, the rash on the skin appeared, and there were great loss of appetite, severe headache, much cachexia, and a good deal of fever. The case afterwards proved to be a very severe one indeed.

That there can be no doubt as to the real character of the two sores is clear to my mind, for the first was a most typical "soft sore," while the second was followed by constitutional syphilis. From my knowledge of the patient I can rely so fully upon his statements that there is really no doubt of the statement made by him that he "never was out in his life, excepting that one night." In the next place, he frequented two places of ill-fame. Now

whether he contracted both diseases in one place, or one in one house and the other in the second, would be interesting to know. The patient succeeded in bringing to my office the woman he had been with in the first place. On examination I found she had a plentiful supply of chancroids, but no appearance of syphilis. It was after the hard sore had appeared on the young man that I sought and obtained this examination of the woman. In the interval that had elapsed since the student had been with her, she might have contracted her sores from some other person, but she asserted that she had the sores and was using a wash for them at the time when Mr. J. C. made her acquaintance. I succeeded in keeping track of this woman for nearly a year and never found the first evidence that she was a victim to syphilis.

We must conclude, then, that the young man contracted his local sores from the person above mentioned, and that his severer disease was due to the intercourse with the second woman. This second woman was a rather famous person, known as "Bell." Though I never could obtain an interview with her, I saw another student, suffering from syphilis, who stated that he got his disease from "Bell" about the same date as did Mr. J. C. This seemed to settle the question in my mind. How it may be with others I cannot say.

MEDICAL PROGRESS.

KAIRIN.—Since DR. FILEHNE, a few months ago, introduced to notice the remarkable antipyretic action of kairin—an artificial alkaloid described as being the hydrochlorate of oxy-chinolin-ethyl—the drug has been given by others whose experience confirms that of the introducer. Thus Dr. Sassetzki (*St. Petersburg Med. Wochenschrift*, September 1st) states as his experience of its use in a case of typhus that kairin is a valuable antipyretic, doses of half a gramme reducing high fever to a normal temperature, which can be kept down by repeating the doses. The pulse falls together with the temperature, and the excretion of nitrogenous and phosphatic substances is lessened. The urine assumes a green color, which disappears very rapidly on ceasing the administration. It is curious that the fall of temperature in this case was not accompanied by sweating. No ill effects resulted from the drug. Another case is recorded by Dr. Knipping, of Neuwied (*Berliner klinische Wochenschrift*, September 10th), which may be briefly given here. A young woman, about twenty years of age, suffered from puerperal pyrexia for about nine days. On the fourteenth day after her confinement she was allowed to rise and take a bath. Next day she complained of pain in the left thigh, and symptoms of parametritis appeared, which were not controlled by the application of ice, leeching, etc., periphlebitis of the left leg also occurred with much irregular pyrexia, and the temperature reached nearly 105° F. On the twenty-fourth day there occurred periphlebitis of the right leg, and the case was further complicated by intestinal catarrh, bronchitis, and some dulness at the apex of the right lung. The morning temperature was 104°; evening, 105.4°, with very slight remissions; pulse 120 to 130, small and irregular. Quinine had been given in full doses without any influence, and the weakness of the patient precluded a resort to cold baths, so that on the thirty-fourth day, when the temperature reached 106.4°, and the heart

was failing markedly, resort was had to kairin. It was given in doses of grs. viiss, in gelatine capsules, every hour. After the first dose the temperature fell to 102.2°, with profuse sweating; after the fifth, to 100.2°. The pulse did not correspondingly fall at first, remaining at 100. A reduction of the dose to grs. iv was followed by a rise in the temperature to 105.4°, with return of the bad symptoms, so that grs. viiss were again given hourly for four hours, when the temperature had fallen to 101.2°. For the next four hours grs. iv were given, with relapse of fever to 102.2° and 103°, again reduced to 100° by resort to the larger dose. The administration was continued for a week, and by the forty-first day the condition was much improved—temperature about 100.4°; and the intestinal and pulmonary symptoms had passed away. On now omitting the drug there was a slight rise in temperature, but this was easily controlled, and the case did well. In the seven days she had taken 220 doses of kairin without any toxic effects, beyond slight pricking sensations on the nose and forehead after the first dose. The urine became of a deep dark-green color, free from albumen and casts, the normal color returning if the drug was discontinued for twelve hours. The writer describes the sweating as being most marked, subsiding as soon as the kairin ceased to act and the temperature rose. He believes the drug in this case to have been the means of saving the patient's life, and insists upon the dose being repeated hourly if the antipyretic action is to be maintained.—*Lancet*, September 29, 1883.

SUBPERITONEAL INJECTIONS OF ALBUMINATE OF IRON IN CHRONIC ANÆMIA.—PROF. A. VACHETTA, having noticed the results obtained with this preparation when administered in the ordinary way, has endeavored to ascertain whether the peritoneum would not absorb it better, in larger quantities and more quickly than the mucous membrane of the stomach. From experiments on dogs, he concludes that the effects of albuminate of iron are more readily obtained by subperitoneal administration than by any other method, and that no inconveniences result from this mode of administration.—*Gazz. degli Ospitali*, No. 35, 1883.

KNEE-HEMARTHROSIS.—At the late meeting of the British Medical Association, MR. JOHN FAGAN read a paper on this subject, and reported four cases. In referring to the diagnosis, he said that it should not be difficult if attention be paid to the following points: 1. The nature of the injury. 2. The time when the swelling appeared. 3. The character of the swelling. 4. The pain.

If a person sustain an injury to the knee, followed by swelling of the joint, it might be well to ascertain if there existed, prior to the injury, a hydrarthrosis, or any other form of enlargement. If swelling follow rapidly the receipt of an injury to a normal knee-joint, and this be limited to the synovial sac, as will be indicated by swelling of the pouch under the quadriceps muscle, and floating of the patella, he thinks the case may safely be diagnosed as one of hæmarthrosis.

He has noticed that very often there is but little pain on manipulation, sometimes there is no pain; the rule is, the pain is not severe. Very frequently accompanying hæmarthrosis there is a smart attack of synovitis. If the case has not been seen early, and there is no satisfactory history, it is difficult to determine which condition predominates. The doubt, however, will be cleared up by the progress of the case. If the case be one of synovitis alone, the swelling disappears under appropriate treatment; if it be due to blood in the joint, the pain and inflammation may disappear, but

the swelling will remain. These facts were well established in some of his cases. Even without a history of enlargement rapidly following injury, if the swelling persist, and be not accompanied with much pain, one usually finds it to be due to the presence of blood in the articulation. Its distinctive characters, as compared with synovitis, are these:

Hæmarthrosis.

Swelling rapidly following injury.
No heat; little, if any, pain.
Joint can be moved.
Absence of fever.
Swelling does not subside under ordinary treatment, or does so only to a moderate extent.

Synovitis.

Swelling after a varying interval.
Heat and pain.
Joint usually fixed.
Fever, more or less.
Swelling subsides under appropriate treatment.

Regarding the treatment of this affection, those surgical text-books that take any notice of it, direct that the case should be treated with the view of promoting absorption of the effused fluid. Since he gave this subject consideration, and gained any experience in connection with it, Mr. Fagan says, without hesitation, that the proper treatment of the affection is to remove at once the fluid by puncture of the joint; by this means the foreign body is immediately got rid of, thereby preventing the possible train of serious symptoms that might follow its presence in the joint.

Up to the present time, he has treated fifteen cases in this manner, using the aspirator two or three times in the same case, and on no occasion has it been followed by the slightest unpleasant result. The way in which he carries out this treatment is to puncture the joint with the large needle of the aspirator, a little above and to the outer or inner side of the patella, whichever is more prominent; the needle is then directed obliquely under the patella. After the fluid is completely removed, he places a small pad of lint, saturated in Friar's balsam, over the point of puncture, puts a bandage firmly round the joint, places the limb on a back-splint, and applies ice-bags. After a few days, if the swelling does not entirely disappear, he punctures again; and unless the case be complicated with some other form of injury, the joint is usually restored to its normal condition within a fortnight or three weeks.

Puncture of the knee-joint was looked upon as a hazardous practice some years ago. Now it is of frequent occurrence, and in the proper cases is followed with the most satisfactory results; and he expects that, after a little time, opening the joint to dispose of coagula that cannot be got rid of by the aspirator will be more frequently practised, and that this heroic but rational mode of treatment will cause less anxiety than puncturing did a few years ago.—*British Med. Journ.*, September 22, 1883.

VARIATIONS OF THE CHLORIDES IN DISEASES.—DR. BUROT read a paper on this subject before the late meeting of the French Association for the Advancement of Science, in which he showed a rapid method for estimating the quantity of the chlorides (the common method with nitrate of silver solution). Instead of using the graduated burette, the precipitating glass, and pipette, Burot inserts a tube, the extremity of which is in the form of a bowl, holding one cubic centimetre of urine. The urine is decanted and a small quantity of a solution of chromate of potash is added.

A burette, graduated in tenths of a centimetre, is used for decanting the solution of nitrate of silver. Each division corresponds to grs. xv of the chlorides per litre. The end of the reaction is indicated by the coffee and milk color due to chromate of silver.

Burot's observations lead him to admit eleven grammes of chlorides per litre as the normal, ten grammes being chloride of sodium, and one chloride of potassium. This proportion will vary, however, with the elimination, and with the causes which increase or diminish the secretory activity of the kidneys. It also varies in different states of disease. Diminution of the chlorides is important in view of the practical deductions which may be drawn from it. In chronic diseases, diminution only indicates feebleness of the digestive powers, unless there exists some other means of elimination, as diarrhoea, dropsy, etc.

In acute diseases, the diminution is proportional to the intensity of the disease, and the disappearance of the chlorides announces the presence of serous effusions or inflammatory exudations.—*Gaz. Méd. de Paris*, No. 35, 1883.

ACUTE GONORRHOEAL RHEUMATISM.—In a paper on this subject in *Guy's Hospital Reports*, vol. xli., Mr. J. N. C. DAVIES-COLLEY suggests that there are several distinct affections confused together under the name gonorrhoeal rheumatism, which he enumerates as follows:

1. *Gonorrhoeal synovitis*, a chronic affection, occurring in the male, generally in the knee-joints. Very rarely it is acute, and goes on to suppuration.

2. *Gonorrhoeal arthritis*, an acute affection, occurring in the female quite as often as in the male; as a rule, attacking at the outset several joints, and afterwards confined to one, most frequently the elbow-joint, affecting especially the fibrous tissues of the joint, and only secondarily the synovial membrane and cartilages.

3. *Gonorrhoeal inflammation of fibrous structures not connected with the joints*, e.g., the plantar fascia, sclerotic, iris, the peri- and endocardium; this gonorrhoeal inflammation of the plantar fascia sometimes occurs in the acute form. Inflammation of the first three structures usually occurs in connection with chronic gonorrhoeal synovitis. In the last two situations inflammations seem to be generally associated with gonorrhoeal arthritis.

With regard to the second class, he says:

1. It usually occurs during the acute stage of gonorrhoea, or some purulent discharge from the genital organs, in adult patients under middle age.

2. It occurs as often in females as in males, if not more often. Of twelve cases recorded by the writer, nine were in females.

3. It may attack any joint, but most often the elbow-joint. Eight of the writer's twelve cases were in the elbow.

4. At first it attacks several joints, like acute rheumatism, and then confines itself, as a rule, to one.

5. Its seat is the fibrous tissue of the joint. There are great oedema, redness, pain, and tenderness. The ligaments are softened, and the cartilage may be disorganized. There is but little synovial effusion, and constitutional disturbance is but slight.

6. It may be confounded at first with acute rheumatism, later on with phlegmonous erysipelas, bursitis, lymphangitis, phlebitis, gout, and pulpy disease of the synovial membrane.

7. It rarely, if ever, suppurates, but is especially prone to set up fibrous ankylosis.

8. The best treatment is to cure the discharge, keep the joint perfectly still, and apply uniform pressure as long as the acute stage lasts, and then to use passive motion.

FLOATING KIDNEY.—PROF. SENATOR'S conclusions recently published in the *Charité Annalen*, based upon the records of thirty-two cases, agree in almost every particular with those to be found in Landau's *Wander-niere der Frauen*. Senator terms the affection "ectopia renis." He found 1 in every 139 sick women to be subject to floating kidney, independently of age or social station. Disappearance of the fat around the capsule of the kidney can hardly be a cause of this condition, for there is little or no such fat in children, amongst whom floating kidney is very rare, and men are as liable to emaciation as women, yet floating kidney is much less frequent amongst men than in women. The absence of fat, as Senator most pertinently observes, does not cause floating kidney, but facilitates diagnosis. The causes are more probably to be found in the condition of the generative organs and defects of attire. Repeated pregnancy, causing pendulous abdomen, is a very probable cause; and uterine displacements are considered by Landau to influence the position of the kidney. The same authority attributes displacement of the kidney to tumors and hydronephrosis, but Senator has never observed these pathological conditions in any of his cases. Tight-lacing is considered as a highly probable cause of floating kidney, as Mr. Clement Lucas observes in his paper on surgical diseases of the kidney, published in this week's *Journal*, and would account for the greater frequency of displacement of the right kidney, which, in a tight-lacing woman, is subject to prolonged pressure by a large solid body, the liver. The greater length of the right renal artery favors displacement of the right kidney. To make diagnosis as certain as possible, the patient should first be placed on her back; the abdominal walls must then be thoroughly relaxed by passive elevation of the lower extremities. In examining the right lumbar region, the surgeon or physician should stand on the same side, and place the left hand on the loin posteriorly, and the right on the abdomen; in examining the opposite side, these tactics must be reversed. Prof. Senator appears to prefer this method to Landau's, for if the medical attendant stand on the opposite side of the patient, with the position of the hands reversed, Senator believes that the displaced organ is more likely to be pushed aside, and thus elude detection.—*Brit. Med. Journ.*, Sept. 29, 1883.

METHOD OF REDUCTION IN DISLOCATIONS AT THE ELBOW.—MR. J. E. KELLEY gives the following method for reducing dislocations at the elbow-joint, especially in cases where assistance cannot be readily obtained:

The operator sits on a corner of a table, at the end of which the patient is placed upon a chair. The injured limb is drawn under the surgeon's proximal thigh, which rests, close to the joint, on the anterior surface of the humerus, while the olecranon is accurately placed on the anterior surface of the lower third of the distal femur, and the proximal foot is "hitched" behind the other leg, which is flexed firmly against the frame of the table. In order to obtain the most favorable fulcrum, the surgeon fixes his proximal elbow against the antero-internal aspect of his corresponding thigh, and, grasping the wrist of the patient with both his hands, reduction is effected by the simultaneous and coöperative action of the muscles of the arms, back, and thighs. Fixation and counter-extension are supplied by the powerful thighs of the operator, and coaptation is effected, with great nicety, by the backward pressure of the proximal femur against the anterior surface of the humerus, while the distal femur forces the olecranon forwards. Owing to the accuracy with which it can be applied, this power, which is incalculably greater than that afforded by the pressure

of the fingers and thumbs (Boyer), is sufficient, when the forearm is steadied, to reduce an ordinary dislocation without the aid of extension. Additional adjusting influence is exercised by the inner side of the proximal thigh, which, by pressing against the anterior surface of the forearm, liberates the coronoid process from its position behind the lower extremity of the humerus, and allows the greater sigmoid cavity to resume its normal relation to the trochlea. Extension is supplied by the muscles of the upper extremities acting round the fixed point provided by the elbow of the surgeon, and, when his body is thrown backwards, additional force is derived from the muscles of the back, the glutæi, and the other extensors of the thighs. This power may be applied at various angles in rapid and easy succession, an advantage which the surgeon experienced in the treatment of dislocations cannot fail to appreciate.

In the lateral modifications of the posterior luxations the reduction is generally effected by the same manoeuvre which is employed for the simple form of dislocation, but should special coaptation be necessary, it is at the disposal of the operator, as, when aided by the powerful constraining pressure of the thighs, the proximal hand can supply sufficient traction and stability, while the other is unoccupied and in the most advantageous position to apply any additional manipulation, which may, if desirable, be afforded by an assistant. If the condition be such that the full extending force of both arms be required, the isolated rural surgeon can, with a little ingenuity, render himself independent of professional aid by fixing the bone of the arm or forearm, which is displaced inwards, by a bandage passing round his own loins, and by making lateral traction on the bone or bones displaced outwards, by another bandage attached to his foot, and passing over his knee, as over a pulley. By this simple apparatus the instinctive movements, which are essential to the reduction of the simpler luxations, are utilized for the treatment of the more complicated forms.—*Dublin Journ. Med. Science*, July, 1883.

EXTIRPATION OF THE KIDNEY.—M. OLLIER has performed this operation three times. In the first case, the operation was performed on account of pyonephrosis in a young woman, believed to be due to obstruction of the pelvis of the kidney by calculi. The extirpation was rendered difficult by adhesions of the capsule to the adjacent parts, and it was found necessary to decorticate the organ. Though the operation was long and tedious there were no untoward symptoms, and the patient recovered. The patient now complains of pain in the liver and left iliac fossa, and at two periods there has been excessive salivation, amounting to more than a quart in half a day.

The second operation was performed on account of a cyst containing about four gallons of fluid. The patient died on the third day.

The third case was one of sarcoma of the kidney. All went well until the tenth day, when the child died suddenly in attempting to raise itself from the bed.—*Gaz. Hebdom.*, No. 36, 1883.

RELATIONS BETWEEN DISEASES OF THE ABDOMEN AND THE RIGHT HEART.—The clinical researches of MM. Potain and Tessier and the recent memoir of M. Rendu, on this subject, are already familiar to many. PASSERINI now adduces a new confirmation of the close relations between visceral diseases and the heart. In three cases of peritoneal effusion, a cardiac insufficiency was soon characterized by prolongation of the first sound and augmentation of the second. This sound disappeared after evacuation of the liquid. Passerini considers this as dependent upon ischæmia of

the abdominal veins compressed by the liquid, and also upon the obstruction to the thoracic veins. This explanation is confirmed by Larcher and Depaul, who have observed prolongation and augmentation of the first sound in pregnant women. Ovarian cysts and large tumors of the abdomen are sometimes accompanied by the same phenomenon. It seems, then, that it can be produced by mechanical compression of the abdomen.—*Gaz. Hebdom.*, No. 36, 1883.

TREATMENT OF PHTHISIS.—DR. E. P. HURD, of Newburyport, Mass., in the *Boston Medical and Surgical Journal* (September 20, 1883), discusses the medicinal treatment of phthisis under the three heads of (I.) the germicide treatment, (II.) the constitutional treatment, (III.) the symptom treatment.

As regards the first, he says it would be presumptuous scepticism to gainsay all the testimony in support of this direct medication. Some benefit is doubtless often derived; the cough is allayed, local congestions arrested, putrefaction of the bronchial secretions prevented, and respiration facilitated. There is, however, no evidence that inhalations, sprays, atomizations, or fumigations have any efficacy in destroying the micro-organisms whose multiplication and whose ravages are supposed to be such important secondary factors in the disease. He says secondary, for he looks upon the constitutional diathesis as of primary importance. If the soil be not first fit for the bacillus, it will not find a habitat there. If it be fit, there is no direct medication known to science which will prevent the development, growth, and multiplication of the parasite. It cannot, then, be too strongly urged that the hygienic and tonic medication constitutes the best germicide medication, and that pure, dry, bracing out-door air is the best antiseptic.

The constitutional treatment of phthisis comprises all those remedial agents which assist nutrition and promote systemic vigor. Chief among these are cod-liver oil, the phosphates and hypophosphites, bitter tonics, alcohol, and arsenic.

He has seen the best results from the oil when large quantities were taken, say four or five ounces a day. In whatever stage of the disease, where cod-liver oil is well supported, amelioration always attends its use. Unfortunately, however, in this stage of softening, and in febrile conditions, it is, as a rule, not borne.

Of the various emulsions in the market, he has had the best success with that of Phillips', which certainly contains the oil globules in a very minute state of division. He has seen this emulsion taken with benefit—and for a long time—by patients with delicate stomachs which revolted against the pure oil.

As regards the hypophosphites and phosphates in phthisis, there is probably nothing specific about them. Alone they have never cured and never can cure consumption. They doubtless have an important subordinate place in the therapeutics of this disease, aiding nutrition, and possibly being appropriated, to some small extent, in supplying the waste of the organic phosphorus compounds.

LUMBRICUS IN THE LIVER.—DR. OKS, of Rasgrad, Bulgaria, describes in *Vratsch*, the case of an almost moribund phthisical patient, who was seized with vomiting and icterus. The liver was much enlarged. After death, the usual appearances of advanced phthisis were discovered. All the biliary ducts were dilated, and the common duct was occupied by a large female lumbricus; one extremity of its body hung free into the duodenum. Deep in the substance of the liver a smaller male lumbricus was found, impacted in a biliary duct. This is a rare, but not entirely unknown, complication of a parasitic disease.—*British Medical Journal*, September 29, 1883.

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SATURDAY, OCTOBER 20, 1883.

FORMS AND TREATMENT OF ANGINA PECTORIS.

DR. HENRI HUCHARD, in the course of an elaborate disquisition on "Angina Pectoris" ("Des Angines de Poitrine," *Revue de Médecine*, August, 1883), classifies the several pathogenetic influences in five groups: The organic form; the nervous; the reflex; the diathetic; and the toxic. These causal conditions admitted, the therapeutical indications are at once manifest. It may be well to clear the ground by a proper definition of the pathogeny of each class.

By the organic form is meant an ischæmia of the heart-muscle, the result of calcification and narrowing, or complete obstruction of the coronary artery. The nervous form is that condition of the cardiac nervous mechanism which has its origin in the state of the nervous system accompanying hysteria, neurasthenia, hypochondria, exophthalmic goitre, and in the masked epilepsy which assumes the objective type of angina pectoris. The reflex form, as the term implies, is a disturbance at some point in the sphere of distribution of the pneumogastric nerve, reflected over its cardiac branches. Irritation of the peripheral nerves at other points may, under some circumstances, be referred to the heart, and induce paroxysms of angina pectoris. The examples of diathetic origin occur in gout, rheumatism, diabetes, and syphilis. Lastly, the toxic cases are caused by the abuse of tobacco, tea, coffee, and, indirectly, of alcohol, etc.

If the limits of the pathogenetic influences including angina pectoris be enlarged to include all the factors above mentioned, the severe definition heretofore given of the malady must be correspond-

ingly modified. An entirely functional state must be admitted to exist, and, indeed, must be regarded as relatively and actually of more frequent occurrence. That form characterized as organic, in which various morbid conditions of the heart exist, are by Huchard entitled *true* angina pectoris, and the functional disorders *false* angina pectoris. The former is the malady described by Heberden, Fothergill, Stokes, and other classical English authorities.

In few maladies are the improvements in our therapeutical resources more conspicuous. In the use of the most effective remedy for the relief of the paroxysm, an admirable illustration is given of the remarkable value of the contributions made to therapeutics by physiological investigations. We refer to the use of the amyl nitrite in this affection—an addition to scientific medicine which we owe to Dr. Lauder Brunton. Remarkable the high tension of the vessels in certain cases of angina pectoris, Dr. Brunton made the fortunate deduction that this condition might be quickly relieved by amyl nitrite, which promptly lowers vascular tension. All the world knows how completely successful the expedient has proved in actual practice. This explanation of the relief afforded by the remedy is not universally admitted. For example, Filehne holds that the relief is due to paresis of the vagus, and Dr. George Johnson that the arrest of the pain in the cardiac nerves is the real factor, the rise in the vascular pressure being secondary to this pain, since the same result follows from irritation of the sensory nerves in any part of the body. Huchard offers an explanation of the good effects of amyl nitrite which seems to us eminently satisfactory. He thinks that the remedy acts by increasing the circulation in the cardiac muscle, which is much impeded by spasm or calcareous changes in the coronary artery, and that it lessens the work of the heart by dilating the peripheral vessels. Not all cases of angina pectoris are accompanied by peripheral vascular spasm, and hence this explanation will not satisfy all the requirements of a perfect theory.

If the curative effect of amyl nitrite is not explicable in a satisfactory manner, its value is none the less firmly established, although failures have been reported. The most facile mode of inhalation is by means of delicate glass vesicles—perls—which may be broken in a handkerchief and readily inhaled with slight loss. Nitroglycerine corresponds in action, and may, therefore, be substituted in some forms of the malady. It is less prompt, and the susceptibility to its action is so varied that some preliminary trials are necessary to determine the proper dose. Whilst nitroglycerine is much inferior to amyl nitrite for the relief of the paroxysms, it has a very important place as a remedy in

those cases of the functional disorder characterized by repeated seizures at short intervals.

The remedy next in importance is morphine subcutaneously. Huchard maintains the thesis that morphine diminishes the contractile energy of the heart, and lessens the vascular tension by dilating the peripheral vessels. Not to mention the mass of opinion in opposition to this view, it will suffice to give the observations of Schüller, who studied the effects of morphine on the vessels of the pia-mater *in situ*, and ascertained that this agent first, and briefly, dilates the vessels, but this is soon followed by decided contraction. The unquestionable good effects of morphine in angina pectoris must, therefore, be sought on other grounds. The two chief reasons for its utility are the relief of pain, and the slowing of the heart movements, permitting a more abundant supply of blood to the heart muscle. The best results in the severest cases, are said to be had from a combination of these remedies by the inhalation of amyl nitrite and the subcutaneous injection of morphine.

When the heart's action is very feeble, as appears to be the condition of the organ in some examples of angina pectoris, the subcutaneous injection of ether, and the intravenous injection of ammonia, are highly useful. In such cases, also, atropine may render important service. The inhalation of ethyl bromide, cautiously carried on, may also prove in a high degree efficacious. This agent has also been employed with excellent results, by the hypodermatic method, in place of ether.

With the means now at our disposal, the treatment of the paroxysms of angina pectoris is most effective. It is, however, more desirable to prevent the attacks. This fortunate result may be attained by the adaptation of remedies to the various pathogenetic conditions. Have we to deal with true angina pectoris—with the organic form? Are there also at work in the causation of the attacks any of those influences concerned in the production of the pseudo affections? Is there a nervous, a diathetic, a toxic, or a reflex element added to the existing organic basis of the seizures? It would seem needless to assert that all causes of disturbance included under these heads, and all unfavorable hygienic influences of every kind, should be withdrawn. Our space will only permit some references to the remedies properly so-called. As in the organic form the condition of chronic arteritis is the chief source of mischief, it becomes exceedingly important to arrest the progress of this destructive change. None of the measures hitherto proposed, unless the treatment by carbonate of soda—the suggestion long ago made by Bretonneau is an exception—has exercised any remedial influence. We are, therefore, fully aware of the assumption involved

in our recommendation, of the carbonate and iodide of ammonium given conjointly with cod-liver oil as the most effective treatment for chronic endarteritis. Huchard concludes that the iodide of potassium or sodium is entitled to rank first as a preventive remedy, and he gives the details of six cases illustrating the remarkable value of this plan of medication. We prefer, to the iodides alone, the combination above referred to, for the following reasons: In chronic endarteritis, when the structural changes in the walls of the vessel encroach materially on the lumen, and retard the blood-current, fibrinous deposits take place, and finally thrombi form. The persistent administration of ammonia is the most effective means of preventing these formations by maintaining the alkalinity of the blood. The iodides contribute to this result. Cod-liver oil with the iodides is probably the best remedy for chronic endarteritis. Besides, by improving the nutrition generally, it tends to give stability to nervous matter. *Sanguis moderator nervorum* is an aphorism of Hippocrates. Arsenic serves a double purpose: as a means of stimulating the nutritive functions and as a moderator of reflex excitability. We have seen cases in which it gave more sustained relief than any other remedy. Under such circumstances, enormous doses are taken with impunity. An apparent tolerance is established, and the large doses, so far from causing gastric disturbance, increase the appetite, improve the nutrition, and induce a condition of mental comfort comparable to that of a favorably acting narcotic. With this mental quietude coincides a calm state of the reflex excitability.

It is in the office of a preventive remedy that nitroglycerine serves so important a purpose. It should be given daily, to maintain the state of diminished vascular pressure. Iodide and bromide of ethyl by inhalation, in quantity far short of that necessary to cause anæsthesia, may also be used daily when attacks are frequent. The bromides also have an important function when reflex excitability is to be moderated.

The diathetic and toxic cases are improved or cured by the removal of the causes, and by treatment addressed to the functional nervous disturbance resulting therefrom.

KNEE-HÆMARTHROSIS.

In a paper read at the recent meeting of the British Medical Association, and published in the *British Medical Journal*, of September 22, MR. JOHN FAGAN, of Belfast, calls attention to the nature, diagnosis, and treatment of knee-hæmarthrosis, which, he asserts, is not noticed in surgical textbooks as an independent affection, and if mentioned as a complication of fracture or some other serious

injury, there is no special guidance to its diagnosis and therapeutics. An idea of the comparative frequency of the lesion may be formed when it is stated that it has been observed in one of the hospitals with which Mr. Fagan is connected, and which contains about eighty surgical beds, twenty times during the past five years.

Extravasation of blood into the knee-joint may be caused by sudden muscular strains, severe contusions, and wrenches of the articulation, through which the mucous ligament and other vascular fringes are lacerated. This form of the complaint constitutes the typical, uncomplicated variety of the lesion, and is of rare occurrence. Another and more frequent form is associated with serious injury to the joint, and varies in degree from a simple fracture of the patella or a fissured fracture of the femur into the articulation, to that of a compound fracture or dislocation, being in the last two events only of secondary importance. In certain forms of the simple fractures mentioned, the fragments remain in close apposition, and the blood is retained in the synovial cavity, through which the lesion belongs virtually to the typical variety. When, however, the fragments are widely separated, or there is much laceration of the synovial membrane, blood is effused both within and without the sac, and, while this condition modifies the symptoms and prognosis, it does not change the mode of treatment.

In all cases of uncomplicated hæmarthrosis, the blood remains fluid for an indefinite period, and in one case of fractured patella and in one of fracture of the lower end of the femur into the joint, fluid blood was aspirated, respectively, in four days and fourteen days after the injury. Absorption of the blood, when it forms the bulk of the swelling, is rarely met with; hence it is useless to institute a plan of treatment directed to that end.

The diagnosis of the affection is not difficult, and is based upon the following points: Swelling rapidly following an injury to the normal knee-joint, and limited to the synovial sac, as indicated by enlargement of the pouch under the quadriceps muscle; mobility of the joint; absence of heat and febrile action; little, if any, pain; and resistance to ordinary methods of treatment. In synovitis, the swelling comes on after a varying interval; the joint is usually fixed; heat, pain, and more or less fever are present; and the enlargement subsides under appropriate measures.

The treatment consists in removing the fluid at once with the aspirator, putting a bandage firmly around the joint, placing the limb on a posterior splint, and applying bags of ice. If, in a few days, the swelling do not entirely disappear, the joint should be punctured again. All of the fifteen

cases treated in this manner recovered, without an unpleasant symptom, in from two to three weeks.

THE ANTAGONISM BETWEEN PARALDEHYDE AND STRYCHNINE.

In a recent issue, we called attention to the valuable hypnotic and anodyne qualities of paraldehyde. The Italian PROFESSOR CERVELLO, to whom we owe this new remedy, has continued his researches, and has recently demonstrated an antagonism of action between paraldehyde and strychnine. His research included three forms of procedure: 1. After a dose of strychnine, a non-lethal quantity of paraldehyde was given. 2. After a dose of paraldehyde, a lethal quantity of strychnine was administered. 3. Both agents were simultaneously used. As a control experiment, the same animals were subjected to the effects of these agents alone. In this way a criterion was established by means of which the narcotic power of paraldehyde and the toxic activity of strychnine could be judged. By this method he demonstrated that paraldehyde arrested the action of strychnine, after the manifestations of poisoning began, or prevented the appearance of toxic symptoms. The antagonism was manifested in what order soever these agents were administered, and when they were given together. Cervello ascertained that it is not necessary to the antagonism that the quantity of paraldehyde given should be above the merely physiological limit, a relatively small quantity sufficing to neutralize the effects of a large dose of strychnine. In a rabbit weighing 1665 grammes (about three and a half pounds), four milligrammes of nitrate of strychnine (more than a lethal dose) were injected, and the symptoms of poisoning vanished under the action of a small dose (less than a drachm) of paraldehyde. To another rabbit, narcotized by a drachm nearly of paraldehyde, six milligrammes of nitrate of strychnine were given, and the animal survived. Strychnine appears to have no influence over the course of the narcotizing action exerted by paraldehyde, for the duration of the narcotic effect is practically the same when strychnine has and when it has not been given. There is, however, a difference as to the time when the narcotic effect produced by paraldehyde manifests itself—strychnine retarding the action, but not altering its character. The seat of the opposing actions is the spinal cord, strychnine increasing and paraldehyde lessening the reflex excitability of the gray matter of the medulla oblongata.

LATERAL CLOSURE OF VEIN-WOUNDS.

DURING the past twelvemonth efforts to popularize partial closure of wounds of veins have been made by PROF. BRAUN, of Heidelberg, and DR. L. S. PILCHER, of Brooklyn, whose papers on the subject may be

found respectively in vol. xxviii., *Archiv für klin. Chirurgie*, and the *Annals of Anatomy and Surgery*, for August, 1883. In support of their views as to the safety of the measure, they refer to Von Wattmann, Von Walther, Bérard, Denonvilliers, Richet, Follin, Hueter, and Von Linhart.

Lateral closure includes ligation, forcipressure, and suture, of which the first is the most generally applicable. As stated by Braun and Pilcher, it should be reserved for the jugular, subclavian, axillary, and femoral veins; but, as a sufficient number of cases upon which to base positive conclusions as to the comparative safety of lateral and complete closure has been recorded of the internal jugular alone, our remarks will be confined to that vessel.

The internal jugular vein has been tied laterally eighteen times, of which three ended fatally from secondary hemorrhage. The wound has been closed with forceps twice, both of which recovered, but forcipressure was resorted to in one after a lateral ligation had failed to retain its hold. The suture has been employed twice, both having been successes as regards bleeding. Leaving out of the question the four examples of suture and forcipressure, it will be seen that of nineteen lateral deligations three were fatal, and one failed to accomplish the object through the slipping of the thread. Hence the measure was unsuccessful in nearly one case in every five.

The same trunk has been completely included in a ligation upwards of fifty times, without a single death from hemorrhage, and without a single premature detachment of the thread. These facts speak for themselves, and they utterly upset all the sophistic arguments that have been advanced in favor of lateral deligation, which, upon the authority of Malgaigne, Von Langenbeck, Pirogoff, C. O. Weber, Von Mosetig, Rose, Blasius, H. Fischer, Billroth, Bardleben, G. Fischer, Boeckel, Nicaise, Dussutour, Tillaux, the elder and younger Gross, Agnew, Ashhurst, Lidell, and Markoe, should be abolished from practice as a dangerous expedient. The plea entered by Pilcher for the catgut thread is not warranted by experience, and his supporter in other points expressly states that the silk ligation is preferable on account of the greater firmness of its knot and its consequent less liability to slip.

THE CENTENNIAL OF THE HARVARD MEDICAL SCHOOL.

IN 1783, one hundred years ago, John Warren, Benjamin Waterhouse, and Aaron Dexter founded the Medical School of Harvard University. Last Wednesday the Centennial Anniversary of this occasion was appropriately celebrated, and by a happy coincidence at the same time the University dedicated to its service the most beautiful and thoroughly equipped building, now in use for the

purposes of medical education, to be found on this Continent.

The Centennial Oration was delivered by Dr. Oliver Wendell Holmes, who, after many years of faithful service in the Chair of Anatomy, has lately retired from active teaching, and on this occasion, probably for the last time, has made a formal address on medical topics. The oration was carefully prepared, and the large audience, which included representative men from different parts of the country, listened with eager attention to the scintillations of wit which fell from the mouth of the poet-anatomist. The address we present in full to our readers through the generous courtesy of *The Boston Medical and Surgical Journal*.

The celebration was appropriately concluded by the presentation to the University of a portrait of Dr. Holmes and a bust of Dr. Bigelow, who, by their faithful professorial teaching, as well as by their conspicuous contributions to literature and the healing art, have rendered eminent service to the University during a goodly portion of the century which it has now completed.

THE MORBID CHANGES IN MYXEDEMA.

VERY few opportunities have been afforded for the study of the morbid anatomy of myxedema. The "cretinoid state" of Sir William Gull, the mucoid degeneration of Ord, and the pachydermic cachexia of Charcot rather suggest the cutaneous appearances than throw light on the pathological conditions. Recently M. HENROT, of Rheims (*Le Progrès Médical*, Sept. 15, 1883), has given an account of the appearances in a case observed by him, and as the changes were carefully studied, it may be useful to lay before our readers the more important results of this examination.

M. Henrot emphasizes the fact that there were no alterations in the skin to account for the characteristic appearances. He found in the cerebrum a considerable hypertrophy of the pituitary body and of the pineal gland. The pneumogastric nerves, the glosso-pharyngeal, the brachial plexus, and the ganglia and fibres of the sympathetic had undergone a notable increase in size. Changes also were found in the meninges of the spinal cord comparable to those which occur in chronic alcoholism. M. Henrot hence concludes that myxedema consists essentially in a return to the embryonic condition of the subcutaneous, submucous, and general connective tissue under the influence of the hypertrophic changes which occur in the sympathetic system and its annexed organs, the pituitary and pineal bodies, leading to the excessive production of mucin, and the infiltration of the affected organs with this material.

SOCIETY PROCEEDINGS.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, Thursday Evening, Sept. 13, 1883.

THE PRESIDENT, JAMES TYSON, M.D., IN THE CHAIR.

DR. CHARLES W. DULLES presented a specimen of very large

ULCER OF THE STOMACH, WITH UNUSUAL FEATURES.

The specimen which I have to show you came from the body of a patient of Dr. Edward L. Anderson, who had had Dr. J. H. Musser to see her in consultation during life, and who asked my assistance in making the *post-mortem* examination because of Dr. Musser's temporary absence from the city. To the clinical notes of Dr. Anderson and my notes of the autopsy, Dr. Musser will, no doubt, add his own impressions of the case, which has appeared to me to be of singular interest and instructiveness.

The following are Dr. Anderson's notes:

Mrs. M., aged 35 years, husband living, the mother of five children, one of whom died of stricture of the pyloric or cardiac end of the stomach. Both her parents died before their fiftieth year.

At my first visit, May 12, 1883, she was confined to bed, and stated that since the birth of her last child she had not been well, having more or less dyspepsia and growing steadily worse for the last six months. She complained of a constant burning pain in the region of the stomach, which nothing seemed to relieve. She vomited daily, sometimes immediately after a meal, but often not until evening, when it seemed to her that all the food she had taken during the day would be ejected. The matter vomited was intensely sour, dark, and frothy, having the appearance of yeast. There was always pain after vomiting, and at all times irregular pains over the abdomen. She was anæmic, emaciated, and had a weak but regular pulse. Upon physical exploration I could find no tumor. Her heart and lungs were normal, and, as I afterwards learned, the urine likewise. The abdomen was resonant. She was placed on a milk diet, with pepsin and ten drops of sulphurous acid every three hours. She took two quarts of milk daily, and did not vomit until the twenty-second of May; a period of ten days. On this day she vomited but a small quantity of food. May 23, the period of her menstruation (though not menstruating from April until the time of her death), she ate, on her own responsibility, a fritter for supper. This indiscretion brought on an attack of vomiting and sufficient prostration to occasion considerable alarm to her family and cause them to send for me. I found her much exhausted, only able to speak in monosyllables, with a pulse of one hundred and four, and respiration forty. She complained of intense, burning pain in the stomach. External heat and sulphurous acid internally gave relief. This was the first time I was able to see the vomited matter, and I found it to be digested blood, about two quarts in amount. Dr. J. H. Musser kindly examined the material microscopically and found blood-corpuscles, pus-globules, and epithelial cells. I was told that she had vomited similar material prior to my first visit. The vomiting was repeated on May 25, 26, 27, and 28, and several times there were free hemorrhages. She was treated with bismuth and carbolic acid, with enemata of milk, whiskey and eggs, and inunctions of cod-liver oil. Hemorrhages occurred again on June 6, 7, and 8. On June 10, Dr. J. H. Musser saw the case in consultation; he thought he detected a tumor. We came to no positive diagnosis, but wavered between carcinoma and

ulcer. It was only when the patient was placed in the knee-elbow position that a tumor could be felt, and this a little to the right of the median line. The treatment was changed to one drop of hamamelis every twenty minutes, and a pill containing one-quarter of a grain of oxide of silver three times daily. June 17 and 18, hemorrhages again occurred, but from this time until her death, about six weeks later, there were no more hemorrhages, little inclination to vomit, and very little pain. This was notwithstanding the fact that, I have reason to believe, for about a month before her death she paid no particular attention to her diet, while the only part of the treatment carried out was the taking of the oxide of silver pill. About three weeks before her death a troublesome cough set in, but it was easily controlled by opium. Her death followed a large meal and free draughts of coffee and water. The act of death was quiet and gradual, unaccompanied by pain or alarm.

Autopsy.—Sept. 2, 1883. Body of Mrs. M., aged 35; thirty hours after death; rigor mortis absent; body much emaciated; right hand puffy with œdema; bruise over middle of right shin. Examination of thorax, abdomen, and pelvis.

There was no fluid in either pleural cavity. Both lungs were attached at the upper part to the parietal pleura, by adhesions which broke down easily. The upper lobe of each lung was pretty well solidified with chronic catarrhal deposits, and quite soft. In each upper lobe there was a cavity. That in the right lung was as large as a hen's egg; that in the left about the size of a pigeon's egg. Both were ragged, and contained dirty grayish detritus. The lower lobes of both lungs contained a number of small nodules of caseous degeneration.

The heart was very small and firm, about the size of a goose-egg. Its valves were normal, and it contained but a small quantity of fluid blood in its right cavity.

The abdomen contained about a third of a pint of slightly turbid serous fluid. There was not the slightest injection of the peritoneum anywhere, nor any other evidence of peritonitis. The pelvic organs were all normal in appearance, except the uterus, which, though of normal size, was in a state of marked retroflexion. The bladder contained about two fluidounces of urine. There was no omental apron. The liver was of normal size and appearance. The gall-bladder was normal in appearance, and contained about half a fluidounce of saffron-colored bile, but no gall-stones. The spleen was normal. The kidneys were of normal size, rather hard, their capsules adherent, their surfaces a little granular. On section, their cortex was found somewhat diminished. The suprarenal capsules were very tough, the right more so than the left. The pancreas was of normal appearance at its left end, but at its right it was attached to the stomach, and was decidedly indurated. Here it was imbedded in a quantity of delicate adhesive bands, which united into a bundle its own duct, the end of the ductus communis chole-dochus, and the pyloric end of the stomach. The intestines were collapsed and empty, except the duodenum, which contained a small quantity of thick, bile-stained chyme.

The stomach itself presented the features of the greatest interest. It was much enlarged by dilatation; its walls were thin and pale; its vessels along the greater curvature much enlarged and full of dark blood. It occupied a standing position from above downwards, and from left to right. It contained about two quarts of grumous, sour-smelling fluid ingesta, and with this it was not nearly filled. At the upper part of the pyloric entrance it bore a firm, puckered induration, looking like a cicatrix, about two-thirds of an inch in diameter. Close by this was a large ulcer,

about two and a half inches long, and over an inch wide, with indurated, thickened, and in part perpendicular edges. This ulcer passed through all the coats of the stomach; nevertheless, the large quantity of fluid contents of this viscus had not escaped from its cavity because the ulcerated part of the stomach was applied against the adjacent pancreas and attached to it by adhesions. This attachment, however was extremely delicate, and would not bear the gentlest handling; it gave way while the viscera were still in the abdomen, upon an attempt being made to lift the pancreas up, while the stomach was held aside. This disclosed what seemed to be a loose connective-tissue mesh between the stomach and pancreas, in which a small quantity of the ingesta was found.

The pyloric orifice of the stomach was at the edge of the induration surrounding the ulcer, and it was so contracted as to barely admit the passage of a grooved director through it.

DR. HENRY M. FISHER presented a case of

TUBERCULAR ULCERATION OF THE INTESTINE, WITH TUBERCULAR INFILTRATION OF THE LUNGS AND SPLEEN.

E. H., æt. 43, married, was admitted to the Episcopal Hospital July 16, 1883. The following notes were taken by Dr. George M. Boyd, the resident physician:

The patient states that she has been sick since last April. Her trouble began with vomiting and purging, which it seemed impossible to check. No cough was complained of, and there appeared, on admission, to be no marked dulness in percussion over either lung, but, in consequence of the patient's statements, a careful physical examination of the lungs was not made. She was very pale and much emaciated. At first, almost all nourishment was rejected, but after a few days the stomach became more tolerant of ingesta.

Pain was complained of in the left inguinal region, where there seemed to be an undue degree of fulness; but the pain was relieved by poulticing, and the diarrhoea was relieved to a certain extent by opium and astringents. Four or five thin, dark, and watery passages occurred every twenty-four hours, in spite of treatment. Sometimes small clots and shreds of coagulated blood were seen in the passages.

The diarrhoea became again more profuse, and the emaciation more extreme. About a week before her death the patient began to complain of cough, and auscultation then revealed tubular breathing and gurgling below the right clavicle.

Death occurred on August 30th. The post-mortem examination was made fifteen hours after death. Rigor mortis hardly yet well established. The body is extremely emaciated, the omentum being almost destitute of fat.

Heart: Weight four ounces; tissue pale.

The apices of both lungs present numerous cheesy nodules, with catarrhal pneumonic thickening. The right lung presents at its apex a cavity with smooth walls of the size of a pigeon's egg.

Spleen: Weight, two and a half ounces; its section shows numerous cheesy nodules.

Left kidney: Weight, two ounces; capsule adherent, and cortex diminished. Right kidney: Weight, four ounces.

Liver fatty.

Small intestine almost empty and contracted; its mucous surface is everywhere injected, and about eighteen inches from the ileo-cæcal valve it presents two or three small round ulcerations, which do not penetrate quite to the peritoneal investment. Mesenteric glands everywhere swollen, and veins dilated.

The large intestine presents throughout its entire extent thickening of its submucous layer and other indications of chronic inflammation. The inflammation has caused in the descending and a portion of the transverse colon complete, or almost complete destruction of the mucous membrane for a space of about three feet. The muscular layers are thickened, and the mesenteric glands swollen, and there is some thickening and undue opacity of the walls of the vessels, but no tubercular granulation can be detected with the naked eye.

DR. FISHER also presented a

CASE OF CANCER OF THE LIVER.

The patient, S. A., æt. 65, single, was admitted to the Episcopal Hospital July 31, 1883.

The following notes were made by Dr. Claxton, the resident physician: While at work, six weeks ago, the patient began to experience pain in the epigastric and right hypochondriac regions. Two weeks later, he noticed that he was jaundiced, and that there was a lump (or swelling) in his abdomen.

Upon admission to the hospital, the patient was much emaciated and very feeble; skin and conjunctivæ intensely jaundiced, of a deep saffron hue.

There was marked bulging noticed in the right hypochondriac and epigastric regions. The tumor, which could be plainly felt through the thin abdominal wall, was found to extend four inches below the xiphoid cartilage and two inches to the left of the linea alba.

The mass occupying the right hypochondriac region was found to be distinctly nodulated and very hard. Some of the nodules appeared to be umbilicated. The patient presented a markedly cachectic appearance; tongue thickly coated with a dirty yellowish-brown fur; his bowels were constipated, and there was anorexia.

Purgation failed to influence the size of the tumor. The patient complained of insomnia, but did not seem to suffer much. Mental action was sluggish. The patient became rapidly weaker, and for fully a week before his death it was noticed that his extremities were very cold and full. Three days before his death his pulse had become so weak as to seem almost imperceptible. Death occurred on August 16th.

The post-mortem examination was necessarily hasty, as the body was removed from the hospital within two hours after the patient's death. The new growths appeared to involve, however, only the liver and the pancreas. The common bile-duct was completely occluded by a hard nodular mass, which had its apparent origin in the pancreas. Above the occlusion the cystic duct and the gall-bladder were distended with dark, olive-green bile. The liver weighed five pounds six and a half ounces. Section of the organ showed complete infiltration with cancer nodules, and little or no normal hepatic tissue could be seen. The spleen was markedly atrophic, weighing one and a half ounce. The kidneys were deeply stained with bile, and seemed somewhat contracted. The heart was very small, and its muscular tissue flabby.

OBITUARY RECORD.

BRIGADIER-GENERAL CHARLES H. CRANE, M.D.,

SURGEON-GENERAL U. S. ARMY.

IN our last issue, we gave a short notice of the death of Surgeon-General CHARLES H. CRANE, U. S. Army, which took place at his residence, in Washington, D. C., on the morning of October 10, 1883, in the fifty-ninth year of his age. He had been suffering for several weeks with an abscess near the root of the tongue, which had opened and formed an ulcer which ex-

tended forwards. The immediate cause of death was hemorrhage from perforation of one of the lingual arteries.

General Crane was the son of Colonel Ichabod B. Crane, of the First U. S. Artillery, and was born in Rhode Island, July 19, 1825. He graduated in Arts, at Yale College, in 1844, and received the degree of Doctor in Medicine at Harvard, in 1847. He at once entered the army, being appointed an Acting Assistant Surgeon the same year, and commissioned as Assistant Surgeon on February 14, 1848.

He served with the Second U. S. Artillery in the Mexican War, and was also in the Florida War. At the close of this, he went to the Pacific Coast, where he remained on duty until the end of 1856; was then transferred to New York City, where he remained, as Attending Surgeon, examining recruits, and as Assistant to the Medical Purveyor, until 1859; accompanied General Scott to the Pacific Coast, September, 1859; was promoted to a Surgeoncy in May, 1861; Medical Director, Department of the South, to July, 1863; in the Surgeon-General's Office until appointed Assistant Surgeon-General, in July, 1866; Brevet Brigadier-General for faithful and meritorious services during the war, and appointed Surgeon-General July 3, 1882. He leaves a wife and one son.

General Crane was greatly esteemed by those who were intimate with him, these being mostly the older officers of the army. He was an excellent executive and administrative officer, and his sudden and untimely death is a heavy loss to the Department.

The following circular has been issued from the Headquarters of the Army:

General Orders, No. 70.

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
WASHINGTON, October 10, 1883.

The following order has been received from the War Department:

It is with regret the Secretary of War announces to the Army the decease of Surgeon-General Charles H. Crane, who died at his residence, in this city, at 6 o'clock A.M. to-day.

General Crane was appointed Acting Assistant Surgeon in November, 1847, and his first duty was to accompany a detachment of recruits to join the army in Mexico. He was appointed Assistant Surgeon February 14, 1848, and served with the Second and Fourth Artillery in Mexico and Florida.

In 1852, he was ordered to the Pacific Coast, where he took part in several expeditions against hostile Indians, rendering distinguished service in an expedition against the Indians near Rogue River, Oregon, in 1856. From December, 1856, to January, 1862, he was Attending Surgeon and Assistant to the Medical Purveyor at New York City. In 1859, he accompanied General Scott in his diplomatic mission to the Pacific Coast. He was promoted Major and Surgeon May 21, 1861. On duty as Medical Director, Department of Key West, Florida, and Medical Director, Department of the South, to July, 1863; and Medical Inspector of Prisoners of War in August and September, 1863. From September, 1863, he was on duty as executive officer in the Office of the Surgeon-General; promoted Colonel and Assistant Surgeon-General July 28, 1866, and appointed Brigadier-General and Surgeon-General on July 3, 1882.

General Crane received the brevets of Lieutenant-Colonel, Colonel, and Brigadier-General for faithful and meritorious services during the War of the Rebellion.

The foregoing notation of the long and faithful service of General Crane simply formulates his official record as an honorable and distinguished officer of the

Army. In the hearts of his many friends another record exists—the outgrowth of his manly worth, earnest devotion to duty, fidelity in friendship, and generous sympathies—that will serve to keep his memory cherished so long as one remains.

The officers of the Medical Department will wear the usual badge of mourning for six months.

By command of GENERAL SHERMAN.

NEWS ITEMS.

BOSTON.

CELEBRATION OF THE ONE HUNDREDTH ANNIVERSARY
OF THE FOUNDATION OF THE MEDICAL SCHOOL
OF HARVARD UNIVERSITY, AND DEDI-
CATION OF ITS NEW BUILDING,
OCTOBER 17, 1883.

(Specially reported for THE MEDICAL NEWS.)

THE Centennial exercises were begun at eleven o'clock in Huntington Hall, Massachusetts Institute of Technology, in the presence of a large audience.

PRESIDENT ELIOT said:

Ladies and Gentlemen: We are met to celebrate the beginning of the second century of the medical school's existence, and the simultaneous completion of its new building.

It is a hundred years since John Warren, Benjamin Waterhouse, and Aaron Dexter were installed as Professors of Anatomy and Surgery, Theory and Practice, and Materia Medica, respectively, and without the aid of collections or hospitals, began to lecture in some small, rough rooms in the basement of Harvard Hall, and in a part of little Holden Chapel at Cambridge. From that modest beginning, the school has gradually grown until it counts a staff of forty-seven teachers—ten professors, six assistant professors, nine instructors, thirteen clinical instructors, and nine assistants working in the spacious and well-equipped building which we are shortly to inspect, and commanding every means of instruction and research which laboratories, dispensaries, and hospitals can supply.

Out of our present strength and abundance, we look back to the founding of the school, and its slow and painful development. We bear in our hearts the three generations of the teachers who have served this school with disinterested diligence and zeal. We recall their unrequited labors, their frequent anxieties and conflicts, and their unfulfilled hopes; we bring to mind the careful plantings and the tardy harvests reaped at last, but not by them that sowed.

We meet, indeed, to rejoice in present prosperity and fair prospects, but we would first salute our predecessors, and think with reverence and gratitude of their toils and sacrifices, the best fruits of which our generation has inherited.

The medical faculty of to-day have strong grounds for satisfaction in the present state of the school; for they have made great changes in its general plan and policy, run serious risks, received hearty support from the profession and the community, and now see their efforts crowned with substantial success. By doubling the required period of study in each year of the course, instituting an admission examination, strengthening the examinations at the end of each year, and establishing a voluntary fourth year of instruction, which clearly indicates that the real standard of the faculty cannot be reached in three years, they have taken step after step to increase their own labors, make the attainment of the degree more difficult, and diminish the resort of students to the school.

They have deliberately sacrificed numbers in their

determination to improve the quality of the graduates of the school. At the same time, they have successfully carried out an improvement in medical education which required large expenditures. This improvement is the partial substitution, by every student, of personal practice in laboratories for work upon books and attendance at lectures.

The North Grove Street building, erected in 1846 or '47, contained only one small laboratory for students—that of anatomy. We shall shortly see that the new building contains a students' laboratory for each of the five fundamental subjects—anatomy, physiology, chemistry, histology, and pathology, and that a large part of the building is devoted to these working-rooms.

It was a grave question whether the profession, the community, and the young men who, year by year, aspire to become physicians and surgeons would support the faculty in making these improvements. The answer can now be recorded. The school has received by gift and bequest three hundred and twenty thousand dollars in ten years; it has secured itself in the centre of the city for many years to come by the timely purchase of a large piece of land: it has paid about two hundred and twenty thousand dollars for a spacious, durable, and well-arranged building; it has increased its annual expenditure for salaries of teachers from twenty thousand dollars in 1871 and '72, to thirty-six thousand dollars in 1882 and '83; its receipts have exceeded its expenses in every year since 1871 and '72, and its invested funds now exceed those of 1871 by more than one hundred thousand dollars.

At the same time the school has become a centre of chemical, histological, and sanitary research as well as a place for thorough instruction; its students bring to the school a better education than ever before, they work longer and harder while in the school, and leave it prepared, so far as sound training can prepare them, to enter, not the overcrowded lower ranks of the profession, but the higher, where there is always room.

The Faculty recognize that the generosity of the community and the confidence of the students impose upon them reciprocal obligations; they gladly acknowledge themselves bound to teach with candor and enthusiasm; to observe and study with diligence, that they may teach always better and better; to illustrate before their students the pure scientific spirit; and to hold all their attainments and discoveries at the service of mankind. Certainly the medical faculty have good reason to ask to-day for the felicitations of the profession and the public.

Nevertheless, the governors, teachers, graduates, and friends of this school have no thought of resting contented with its present condition. Instructed by its past, they have faith in its future. They hope, they know, that the best fruits of their labors will be reaped by later generations. The medical profession is fortunate among the learned professions in that a fresh and boundless field of unimaginable fertility spreads out before it.

Its conquests to come are infinitely greater than those already achieved. The great powers of chemistry and physics, themselves all new, have only just now been effectively employed in the service of medicine and surgery. The zoologist, entomologist, veterinarian, and sanitarian have just begun to contribute effectively to the progress of medicine. The great achievements of this century in medical science and the healing art are all prophetic. Thus, the immeasurable deliverance of mankind from smallpox is an earnest of deliverance from measles, scarlatina, and typhoid fever.

Within forty years anesthetics and antiseptics have quadrupled the chances of success in grave surgical operations, and have extended indefinitely the domain of warrantable surgery; but in value far beyond all

the actual benefits which have thus far accrued to mankind from these discoveries, is the clear prophecy they utter of greater blessings to come. A medical school must always be expecting new wonders.

How is the medical science to be advanced? First, by the devoted labors of men, young and old, who give their lives to medical observation, research, and teaching; secondly, by the gradual aggregation in safe hands of permanent endowments for the promotion of medical science, and of the sciences upon which medicine rests.

Neither of these springs of progress is to fail us here. Modern society produces the devoted student of science as naturally and inevitably as mediæval society produced the monk. Enthusiastic devotion to unworldly ends has not diminished; it only manifests itself in new directions. So, too, benevolence and public spirit when diverted by the teachings of both natural and political science from many of the ancient forms of benevolent activity, have simply found new and better modes of action.

With thankfulness for the past, with reasonable satisfaction in the present, and with joyful hope in the future, the medical faculty celebrate this anniversary festival, welcoming their guests, thanking their benefactors, and exchanging with their colleagues, their students, and the governing boards mutual congratulations and good wishes, as the school sets bravely out upon its second century.

And now, ladies and gentlemen, I have the pleasure of presenting to you our oldest professor and our youngest, our man of science and our man of letters, our teacher, and our friend Dr. Holmes.

Dr. Holmes then delivered his oration (see page 421).

DR. FRANCIS MINOT then presented a portrait of Prof. Holmes, in behalf of the donors. He said:

MR. PRESIDENT: "Many alumni of the school, beside many of its present students, have desired that a permanent memorial of their beloved teacher, Professor Oliver Wendell Holmes, should be placed in the new college building, in token of their gratitude for the great services which he has rendered to many generations of his pupils. By his eminent scientific attainments, his sound method of teaching, his felicity of illustration, and his untiring devotion to all the duties of his chair, he inspired those who were so fortunate as to come under his instruction, with the importance of a thorough knowledge of anatomy, the foundation of medical science.

In the name of the alumni and students of this college, I have the pleasure of presenting to the medical faculty, a portrait of Prof. Holmes, painted by Mr. Alexander, to be placed in the college in memory of his great and invaluable services to Harvard University, to the medical profession, and to the community.

HON. SAMUEL A. GREEN, M. D., in behalf of the donors, then presented a bust of Prof. Henry J. Bigelow. He said:

The pleasant duty has been assigned me, Mr. President, to present to you, as the head of the corporation of Harvard College, in behalf of his many friends, this animated bust of Professor Henry J. Bigelow.

The list of subscribers comprises about fifty names, and includes nearly all the surgeons of the two great hospitals in this city; several gentlemen not belonging to the medical profession, but warm personal friends of Dr. Bigelow; a few ladies who had been his patients, and all the surgical house pupils who had ever been connected with the Massachusetts General Hospital, during his long term of service at that institution, so far as they could easily be reached by personal application.

The bust is given on the condition that it shall be

placed permanently in the new surgical lecture-room, which corresponds to the scene of Dr. Bigelow's long labors in the old building. It has been made by the eminent sculptor Launt Thomson, of New York, and is a most faithful representation of the distinguished surgeon. It outlines with such accuracy and precision the features of his face and the pose of his head that nothing is wanted, in the opinion of his friends, to make it a correct likeness.

I need not, in the presence of this audience, name the various steps by which Dr. Bigelow has reached the high position which is conceded to him as freely and fully in Europe as it is in America; but I cannot forbear an allusion to some of his original researches.

His mechanism of the reduction of a dislocated femur by manipulation was a great discovery in surgical science, and follows as a simple corollary to the anatomical facts which he has so clearly and minutely demonstrated. His operation of rapid lithotomy has deprived a painful disease of much of its terror, as well as of its danger.

Nor should I overlook on this occasion his quick and ready discernment of the importance of Dr. Morton's demonstration of the use of ether as a safe anæsthetic, which took place at the Massachusetts General Hospital, in the Autumn of 1846. The discovery of this greatest boon to the human family since the invention of printing was fraught with such immense possibilities that the world was slow to realize its magnitude; but by the clear foresight and prudent zeal of Dr. Bigelow, shown in many ways, the day was hastened when its use became well-nigh universal.

Dr. Bigelow has filled the chair of surgery in this medical school during thirty-three years, a period of professional instruction that rarely falls to the lot of any teacher, and he now leaves it with the honored title of Professor Emeritus. During this long term of service he has taught through his lectures probably not fewer than 1800 students who have graduated at the Harvard Medical School, and perhaps 7500 more who have taken their degrees elsewhere; and by these thousands of physicians now scattered throughout the land, those of them who survive, Dr. Bigelow is remembered as most eminently a practical teacher—active in his profession, clear in his instruction, and enthusiastic in his investigations, he always had the happy faculty of imparting to his students a kindred spirit and zeal.

"Haud inexpertus loquor."

The audience then adjourned to the Medical College on Boylston St., where

THE DEDICATORY SERVICES

were held.

After prayer, PRESIDENT ELIOT said: On behalf of the President and Fellows of Harvard University and of the Medical School, I now declare this building to be henceforth devoted to the advancement of medical science, and to the improvement of the art of healing.

MR. HENRY LEE, in behalf of the donors of the building, said:

Mr. President: Thanks for your invitation to be present on this interesting occasion,—the hundredth anniversary of your Medical School, and the dedication of a new building of fair proportions well adapted to your wants, as far as a non-professional can judge.

You have assigned to me the honorable task of speaking for the contributors to the building fund.

I little thought, as I used to gaze with awe at that prim, solitary, impenetrable little building in Mason St., and with the aid of imaginative companions, conjure up the mysteries within, I little thought that I should ever dare to enter, and explore its interior; nor have I

yet acquired that relish for morbid specimens which characterized my lamented kinsman, who devoted so many years to accumulating and illustrating your pathological collection.

It was an ordeal to a layman, Mr. President, especially to one who has reached the sixth age, to be so forcibly reminded, as one here is, of the

"—last scene of all
That ends this strange, eventful history,
Sans teeth, sans eyes, sans taste, sans everything."

And it is a further ordeal to assume to speak for others, whose motives for aiding you I may not adequately set forth.

This I can say, that we are citizens of no mean city; that private frugality and public liberality have distinguished the inhabitants of this "Old Town of Boston" from the days of the good and wise John Winthrop, whose own substance was consumed in founding this colony, to the present time.

Down through these two centuries and a half, the multiform and ever-increasing needs of the community have been discovered and supplied, not by the Government, but by patriotic citizens, who have given of their time and substance to promote the common weal, remembering "that the body is not one member, but many, and that the members should have the same care one for another."

It is this public spirit, manifested in its heroic form in our civil war, that has made this dear old commonwealth what we all know it to be, despite foul slanders. Far distant be the day when this scene of brotherhood shall be lost.

Purple and fine linen are well, if one can afford them; but let not Dives forget Lazarus at his gate.

"Ill fares the land to hastening ills a prey,
Where wealth accumulates, and men decay."

Whatever doubts may arise as to some of our benevolent schemes, our safety and progress rest upon the advancement of sound learning, and we feel assured that the increased facilities furnished by this ample building for acquiring and disseminating knowledge of our fearful and wonderful frame, will be improved by your brethren.

Some of the papers read before the International Medical Congress in London, two years ago, impressed me deeply with the many wants of the profession.

And who are more likely to have their wants supplied? For the physician is not regarded here as in some countries, as the successor to the barber surgeon, and his fees slipped into his upturned palm as if he were a mendicant or a menial.

Dining with two Englishmen a few years since, one an Oxford professor, the other the brother of a lord, I was surprised to hear their views of the social standing of the medical profession, and could not help contrasting their position here, where, if not all autocrats, they are all constitutional, and some of them hereditary, monarchs, accompanied by honor, love, obedience, and troops of friends.

But, however ranked, physicians have the same attributes the world over. I have had occasion to see a good deal of English, French, German, and Italian physicians under very trying circumstances, and have been touched by their affectionate devotion to their patients.

The good physician is our earliest and our latest friend; he listens for our first and our last breath; in all times of bodily distress and danger, we look up to him to relieve us.

"Neither the pestilence that walketh in darkness; nor the sickness that destroyeth in the noonday deters him."

"Alike to him is time or tide,
December's snow or July's pride;
Alike to him is tide or time,
Moonless midnight or matin prime."

The faithful pursuit of any profession involves sacrifice of self; but the man who calls no hour his own, who consecrates his days and nights to suffering humanity, treads close in the footsteps of his Master.

No wonder, then, that the bond between them and their patients is so strong; no wonder that we respond cheerfully to their call, in gratitude for what they have, and in sorrow for what they have not been able to do to preserve the lives and to promote the health of those dear to us.

And how could money be spent more economically than to promote the further enlightenment of the medical profession?

What better legacy can we leave our children, and our children's children, than an illumined Medical Faculty?

DR. HENRY W. WILLIAMS, in behalf of the Medical Faculty, then said:

Friends of the Harvard Medical School: For a hundred years the medical faculty of Harvard College have earnestly sought to discover, and striven faithfully to teach whatever might exalt the condition, relieve the woes, and prolong the service of those minds and bodies, through which man lives, and moves, and

we see a fulfilment of our hopes, and the means and assurance of future success.

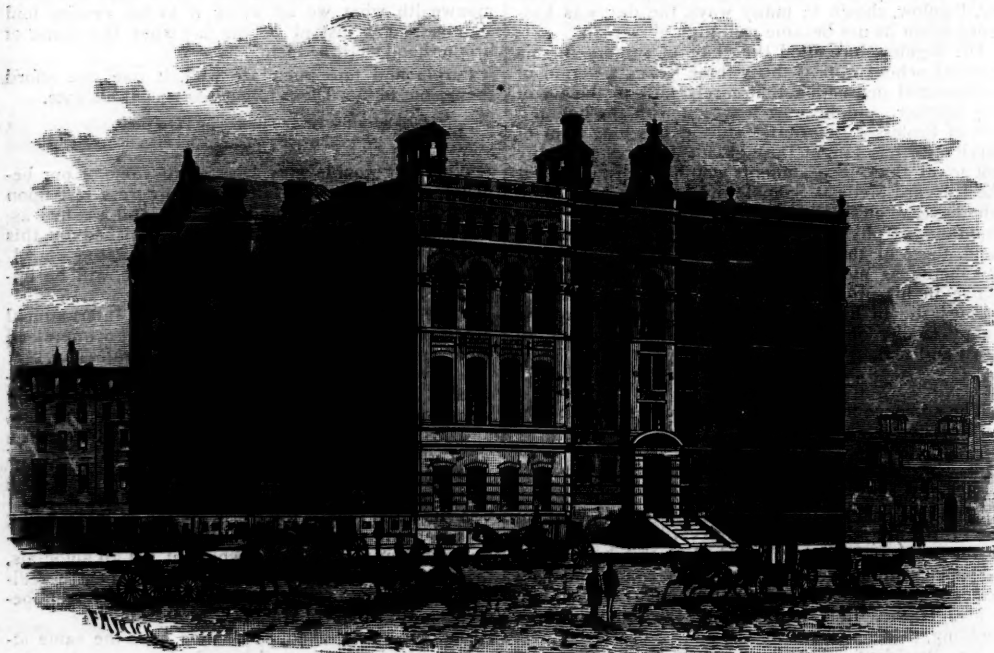
Thanks to generous benefactors, there will no longer be a lack of room or of appliances for our needs; our work will go on under fairer auspices, and we can offer to disciples of the healing art fitter opportunities, and ampler aid in their studies.

As spokesman of the Faculty on this occasion, so full of felicitation and of promise, I would I could give to their message a host of tongues, to adequately thank those whose great flood of bounty has thus favored and endowed us.

In occupying this beautiful and convenient structure, we shall ever feel that this place is dignified by the giver's deed; and we rejoice the more because we know that this gift of \$300,000 has been bestowed by those who are accustomed to use their own eyes in their estimation of merit, and that it signifies a hearty approval of our endeavors, and shows that medical science, as it is to be here embodied and taught, shall have a warm and generous support.

In accepting this more than princely gift, as a token that the value and necessity of well-educated physicians to every community are felt and acknowledged, we hail the privilege of goodly fellowship in which the donors and ourselves have become co-workers to the end that blessings to the whole land may arise and be memorized in this institution; and we trust that the

FIG. 1.



THE HARVARD MEDICAL COLLEGE.

is. Year by year they have seen their horizon of knowledge extended, and their sphere of duty enlarged. But, though zeal and self-sacrifice have not been wanting, their efforts to be useful have been continually hindered, because of imperfect facilities and scanty resources.

All is changed; in this, more wonderful than Aladdin's palace, risen from the sea, and which has already endured the wrath and mercy of the flames,

efforts of the faculty to advance the knowledge, train the judgment, and perfect the skill of those entering our profession will ever continue to deserve countenance and help.

At the conclusion of the exercises, a handsome collation was served, and the building was then inspected.

In the evening, the Medical Faculty entertained their guests at Young's Hotel.

A DESCRIPTION OF THE NEW BUILDING ERECTED FOR
THE MEDICAL SCHOOL OF HARVARD UNIVERSITY.

In order to secure for each student that direct personal supervision and instruction, forming such a marked feature of the courses offered, especially in the thorough laboratory training, which is so essential in securing a broad foundation for future clinical work, larger and better equipped rooms were required than could be obtained in the old school-building. A comparison of the plans with their detailed description will give a clear appreciation of the facilities afforded to the departments of anatomy, physiology, and chemistry, and of the carefully arranged rooms for the lectures on therapeutics, materia medica, and those branches of medicine and surgery which can be taught away from the bedside of the patient.

The comfort and convenience of the students have been carefully considered, as will be seen from the ample provision made for a study, coat-room, smoking-room, and lavatories.

The building is situated in Boston, at the corner of Boylston and Exeter Streets, in the new part of the city which is destined to be its educational centre, and which now contains numerous handsome structures, both public and private. It is at nearly equal distances from the Massachusetts General Hospital, the City Hospital, the Boston Dispensary, and the Children's and Women's Hospitals, with their rich stores of clinical material available for the purposes of teaching.

The corner position, and the reservation of a large open area on the east, will always insure good light and air to the building, which has a frontage of one hundred and twenty-two feet towards the north on Boylston Street, and of ninety feet towards the west on Exeter Street. It is handsomely built in the style of the renaissance, freely treated and developed in brick, trimmed with red sandstone and terra cotta. Decorative panels of the latter material, inscribed with the names of men great in the annals of medicine, Hippocrates, Sydenham, Paré, Celsus, Vesalius, Galen, Haller, Hunter, Harvey, and Bichat, are placed in the facade. It has four lofty stories topped by a sky-line of stone balustrades and low gables, the latter marking structural divisions of the interior. The main front on Boylston Street has three pavilions, of which the central is slightly recessed. In the interior, the material used and the plan of construction are those which the experience of the present day has shown to be the best proof against fire, all the walls being of brick without furrings, with occasional minor partitions of concrete building blocks. The floors and roof are of "mill construction," and made of three-inch planks, laid flatwise upon heavy square beams, which form the constructive and decorative divisions of all the ceilings, there being no inclosed spaces in any part. On the under side these ceilings and beams are throughout encased with plaster on wire lathing, and embellished with stucco mouldings and cornices, to serve as a protective envelope in case of fire. In order to avoid columns, the larger rooms are crossed by heavy compound trusses of iron, also encased in plaster, and into these are framed the wooden floor beams.

The building is finished throughout in natural woods

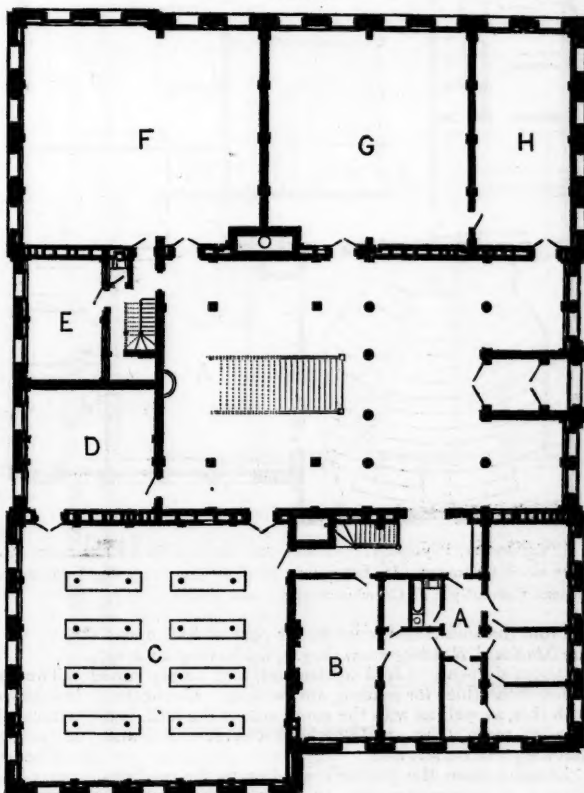
polished, and the walls are handsomely painted in warm colors.

Heating and ventilation are accomplished by means of large stacks of steam radiators, which warm the fresh air as it passes over them to be distributed throughout the building. The air is removed by a series of flues connecting with a central shaft in which an upward current is maintained by means of heated coils of pipe. An additional amount of direct heat is furnished by small radiators placed in each room.

Both hot and cold water are supplied wherever needed, and the entire building is abundantly lighted with gas.

The plan, in general, is that of a large central hall, lighted from above, containing the main stairway, about which the different rooms are grouped. Adjoining this are two brick wells extending from the cellar to the roof. In one of them is a stairway giving access to the instructors' rooms, and which can be used as a fire-escape if necessary. In the other is the elevator for passengers and freight, with doorways opening at

FIG. 2.



A. Janitor's apartments. B. Coat-room. C. Reading-room. D. Smoking-room. E. Ante-room. F. Lecture-room. G. Library. H. Faculty-room.

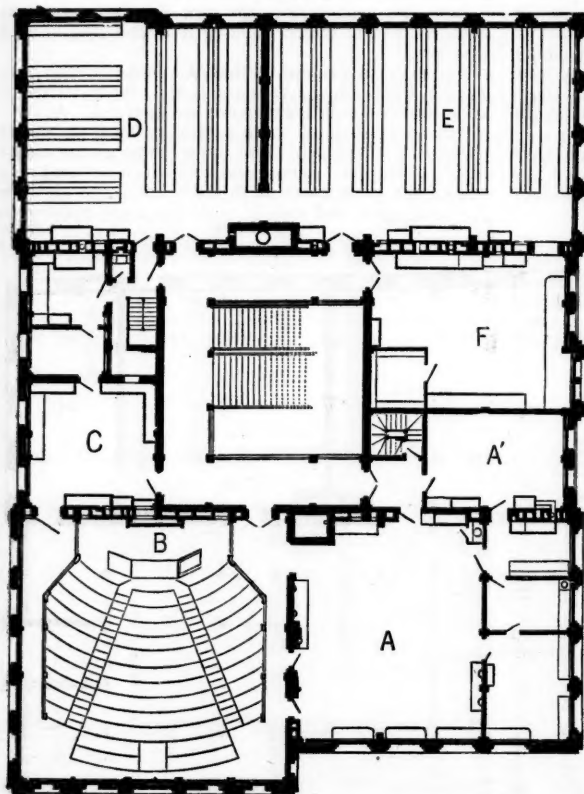
the several landings of the stairways, and others communicating with the various rooms connected with the laboratories and lecture-rooms. Four floors and a basement are required for the various rooms.

GROUND FLOOR.

The main entrance to the building is into the central hall from Boylston Street. In the interior, over the

main entrance, has been placed a handsome marble tablet on which are inscribed the names of the medical alumni who fell in the War of the Rebellion. On the left or easterly side of the wall is an archway leading to a window opening into the *Janitor's Apartments* (Fig. 2, A), where letters and packages for the students are received, and where bells and speaking-tubes connecting all parts of the building unite.

FIG. 3.



A. Laboratory, Physiology. A'. Mechanic' sroom. B. Lecture-room. C. Ante room, Chemistry. D. Laboratory, Medical Chemistry. E. Laboratory, General Chemistry. F. Chemical Supply-room.

From the southeast corner of the central hall opens the *Students' Reading-room* (Fig. 2, C), having an area of about sixteen hundred square feet, and amply provided with tables for reading and writing. Connected with this, as well as with the south side of the hall, is a smaller room (Fig. 2, D) where conversation and smoking will be allowed.

Leading from the janitor's window to the reading-room is a narrow corridor, from which the students' *Lavatories*, etc., in the basement are reached, while the remainder of the latter is used for the heating apparatus and storage. The coat-room (Fig. 2, B) also opens from this entry.

A large room and adjoining ante-room (Fig. 2, F and E) have not been especially assigned as yet, but will be used for lectures or recitations as occasion may require.

Occupying the centre of the westerly side is the room for the general *Library* (Fig. 2, G), with ample space for its valuable medical classics and the more

recent books which are added from time to time. Next to this on the north is the room for the faculty (Fig. 2, H), where its meeting will be held and the school records preserved.

SECOND FLOOR.

A broad flight of iron stairs leads to the second floor, which is entirely devoted to the *Departments of Physiology and Chemistry*, with their laboratories and lecture-room. The physiological laboratory (Fig. 3, A) occupies a space forty by thirty feet in the centre of the eastern side. It will be provided with the most approved apparatus for illustrating lectures and for students' use. Opening into the laboratory on the north are rooms for the professor and his assistants, as well as one especially fitted for chemical manipulation. Adjoining the laboratory on the west is a room for the mechanic (Fig. 3, A') who takes care of the laboratory and makes needed repairs. Above is a room for a special library and study for the department. The laboratory is directly connected with the lecture-room (Fig. 3, B), beneath the seats of which are rooms for special and optical experiments.

The *Chemical Department* occupies the entire western side of this floor. The large laboratory, having over two hundred desks, is divided to accommodate the classes in general and medical chemistry (Fig. 3, D and E), and will be provided with spacious hoods, steam-baths, and all modern apparatus. The room for the professor is on the south, opening into the laboratory on one side, and into a preparation-room (Fig. 3, C) adjoining the lecture-room on the other. Special analyses will be conducted in the half-story over C and the adjoining rooms. The laboratory assistants' room, from which supplies of chemicals and apparatus will be distributed to the students, is situated upon the north side (Fig. 3, F). An assistant will be at hand to aid students in the laboratory throughout the day.

The students' entrance to the lecture-room (Fig. 3, B), is from a landing half-way between the second and third floors. This room, which will accommodate about two hundred persons, is furnished with raised seats, planned after a careful comparison of the most approved models. A large blackboard and screen for diagrams are placed against the wall.

THIRD FLOOR.

The third floor contains the *Amphitheatre* for the lectures on *Anatomy and Surgery*, the Warren Anatomical Museum, and two large rooms for medical lectures and recitations.

The seats of the amphitheatre (Fig. 4, B) are arranged in the manner implied by the name, for the purpose of giving each student an unobstructed view of the demonstrations. The same general model of seat has been used here as in the room below, but so modified as to meet the special requirements of the teaching. The room is thirty feet in height and lighted from above as well as from the sides, and will accommodate about three hundred students.

On the south side are the rooms for the professor and demonstrator of anatomy (Fig. 4, C); while connecting with the floor of the amphitheatre by a short passage are the rooms for the surgical department (Fig. 4, B') and curator of the museum (Fig. 4, A'). Direct

access to the museum is also to be had from the floor of the lecture-room.

The room intended for the *Warren Anatomical Museum* (Fig. 4, A) extends eighty feet along the north side of the building, is forty feet in width, and has a height of eighteen feet. The collection is placed in cases against the wall and in alcoves, divided into two tiers by a light gallery extending round the room. The cases themselves are handsomely made in the manner best adapted to prevent the entrance of dust and insects, and the specimens number over seven thousand.

The two lecture-rooms (Fig. 4, D and E) opening from the westerly side of this floor are especially intended for exercises which do not require extensive demonstration or experiment. The seats are placed on the floor level, while the lecturer occupies a raised platform, behind which are the screen and blackboard. Separating these, but connecting with both, is an ante-

room (D') where diagrams and other illustrations can be kept.

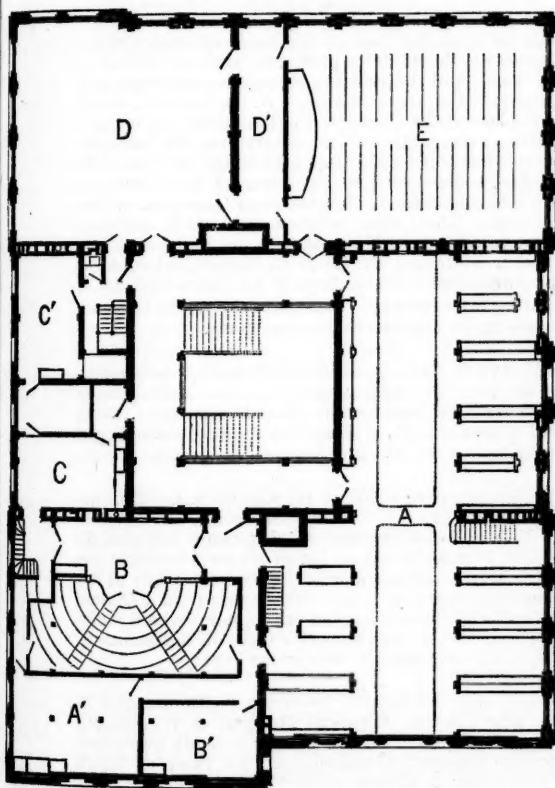
FOURTH FLOOR.

In the southeast part of the fourth floor two large doorways give access to the upper part of the amphitheatre, and it is through these that the students enter (Fig. 5, B).

Occupying two-thirds of the western side of this floor is the large room for practical anatomy (Fig. 5, E). Large skylights give abundant direct light upon the tables for classes, while the windows lining the sides of the room serve the same purpose for special students working at benches placed beneath. The floor slopes slightly, and is waterproof. Boxes for books, instruments, etc., with separate lock and key for the students' use, are placed against the wall.

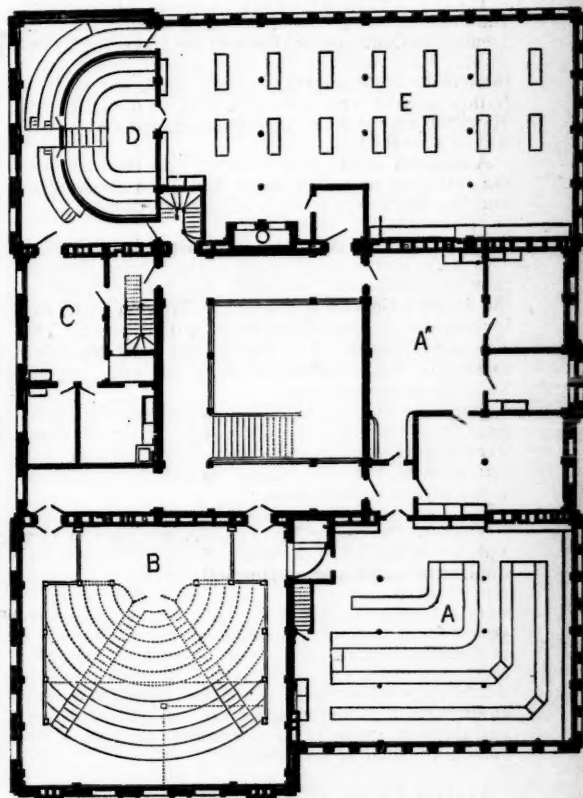
A small amphitheatre (Fig. 5, D) opens from this.

FIG. 4.



A. Museum. A'. Curator's room. B. Amphitheatre. B'. Ante-room. C. Demonstrator's room. C'. Demonstrator's room. D. Lecture-room. D'. Ante-room. E. Lecture-room.

FIG. 5.



A. Laboratory, Pathological Anatomy and Histology. A'. Laboratory, Experimental Pathology. B. Amphitheatre, Upper Half. C. Ante-rooms, Anatomy, Surgery, and Obstetrics. D. Amphitheatre, Operations and Demonstrations. E. Practical Anatomy.

Here operative courses in surgery and obstetrics will be held, and special demonstrations given. In close proximity are the rooms for the demonstrator and his assistants (Fig. 5, C).

The pathological laboratory is entered from the northeast corner of the building (Fig. 5, A). It has been arranged with special reference to the exhibition of recent morbid specimens and for microscopical work. A private stairway leads to the museum, so that speci-

mens for comparison or illustration can always be easily obtained. A series of continuous tables occupy the centre of the room, along which specimens can be passed for inspection after they have been demonstrated. The height of the tables has been regulated with special reference to the use of microscopes, as the classes in normal and pathological histology will also work here. Placed beneath the windows are tiers of boxes, where the instruments are to be kept. Two

large open sinks are provided for general use, and one, smaller and covered with a hood, for use in demonstrations.

Four smaller rooms (Fig. 5, A') connect with this laboratory, where advanced students or graduates can make special investigations under the direction of the professor of pathological anatomy.

From this brief description it will be seen that facilities are offered to the student for the thorough study of medicine in all its branches. The new laboratory arrangements are not excelled in this country, and the well-appointed rooms for lectures and recitations afford every means for the collection and display of illustrations. These greatly increased conveniences for laboratory and didactic instruction are supplemented by the numerous and varied opportunities for the observation and study of clinical cases, so amply provided at the different general and special hospitals and dispensaries.

YELLOW FEVER AT PENSACOLA.—Surgeon-General Hamilton received, on October 12th, a telegram from Lieutenant-Commander Welch at the Navy Yard, Pensacola, Fla., reporting the last case of yellow fever there to be convalescent. Unless there are signs of further cases of fever during the next ten days, General Hamilton says that the quarantine against that section will be abolished.

A dispatch received on October 13th reported that the last case of yellow fever had been discharged, and that there were no signs of any new cases.

THE FEVER IN ALABAMA.—A dispatch of October 13th states that Surgeon Stone, of the Marine-Hospital Service, stationed at Savannah, has been ordered by the Surgeon-General to proceed to Brewton, Ala., and investigate the alleged epidemic at that place. The Louisiana State Board of Health has been requested to send a competent inspector to act with Surgeon Stone in the investigation.

Since last Saturday night there have been five deaths from the prevailing fever at Brewton. Five new cases were reported during that time. Fever experts have arrived there, but have, as yet, reached no decision as to the nature of the disease.

YELLOW FEVER AT HAVANA.—A telegram of Oct. 13th states that D. M. BURGESS, Sanitary Inspector of the United States Marine-Hospital Service at Havana, reports that during the month of September there were 562 deaths in that city. Sixty deaths were from yellow fever, forty-four of which occurred among the mercantile shipping and private individuals, and the remainder in the military hospital. There were twenty deaths from yellow fever at Havana during the week ending Oct. 5. The wharves are markedly infected, and shipping going to them now runs the risk of becoming invaded by the disease.

YELLOW FEVER AT VERA CRUZ.—A report from Vera Cruz of Sept. 27 says that no yellow fever has recently occurred among the shipping at that port.

SMALLPOX IN NEW ORLEANS.—For the weeks ending September 29th and October 6th there were, respectively, six and three deaths from smallpox in New Orleans.

TYPHOID FEVER IN CONNECTICUT.—Much anxiety is felt at Waterbury regarding the health of the city. There were sixteen deaths from typhoid fever in August, nine in September, and several this month. There are at this time many persons sick, and the prevalence of disease is attributed to the low water-supply, and the opening of the streets for new sewers.

KOCH'S INVESTIGATIONS OF CHOLERA.—Dr. Koch, of the German Commission which went to Egypt to investigate the cholera epidemic, reports that he has discovered that cholera is due to a living thread-like microscopic organism, resembling that seen in cases of phthisis.

GIFT TO THE VERMONT UNIVERSITY.—Mr. John P. Howard has announced his intention of giving a new building for the medical department of the University of Vermont, and of refitting the old building for a gymnasium. The cost will be about \$40,000. This will make over \$400,000 that Mr. Howard has given to the University and the city within ten years.

FRENCH ASSOCIATION OF PHYSICIANS.—The Presidency of the Section of Medicine of this body has been conferred upon M. NICAISE, for 1884. The next Congress of the Association will be held at Grenoble.

HONORS TO PROFESSOR LISTER.—Professor Lister, who recently spent some days in Pesth, was warmly welcomed on the part of the medical faculty of the University there. The professors gave a banquet in his honor, and the students arranged a torchlight procession to the great surgeon. At the banquet, which took place at the Queen of England Hotel, all the professors were present. The dinner over, the students, several hundred strong, appeared before the hotel with torches, a deputation was sent up, and Mr. Lister and his wife, followed by the professors, came out on the balcony. They were received with much cheering. After an address in Hungarian by one of the students, another addressed Mr. Lister in English, asking to be the interpreter of the feelings of his fellow-students in offering their homage. Mr. Lister replied in German, thanking the students for their welcome.

HARVEY'S REMAINS.—On last Thursday the remains of the illustrious surgeon and physician, Harvey, were to be removed from a vault under Hempstead Church, and placed in the Harvey Chapel in a sarcophagus furnished by the Royal College of Physicians.

MALADY OF THE COUNT DE CHAMBORD.—The disease of the late COUNT DE CHAMBORD, according to M. Vulpian, who saw him in consultation, was characterized, from an anatomical point of view, by ulcerations of the gastric mucous membrane, and especially of the mucous membrane of the œsophagus; from a clinical point of view by a collection of symptoms which inevitably led to the diagnosis of cancer of the stomach. There was also degeneration of the kidneys.

GARFIELD MEMORIAL HOSPITAL.—The erection of the new Garfield Memorial Hospital in Washington began last week. On the ground recently purchased by the Hospital Association at the head of Tenth Street, there is already a brick dwelling-house commanding a fine view of the city. This house is two stories high, and has ample rooms, and will be used as the dwelling of the officers and attendants at the Hospital.

WEST VIRGINIA STATE BOARD OF HEALTH.—Dr. Geo. H. Carpenter, of Moorefield, has retired from the State Board of Health of W. Va., to accept the place vacated by Dr. N. D. Baker, of Martinsburg, on the Board of Directors of the Asylum for the Blind and Deaf at Romney, while Dr. Baker has taken Dr. Carpenter's place on the State Board of Health. The exchange of places was made by Governor Jackson to accommodate the wish of Drs. Baker and Carpenter.

STUDENT'S CLUB-ROOM AT GUY'S HOSPITAL.—Among the recent improvements made at this hospital for the accommodation and convenience of students, is the formation of a club and refreshment room, which enables the industrious student to obtain a mid-day meal without going out to one of the dining and coffee-houses in the neighborhood. The entrance fee is merely nominal, and the food cheaper and better served than that to be obtained elsewhere. Experience has shown that, so far from being a lounging-room for the idle, those who frequent the club are industrious men who desire to save the time lost in going outside the walls of the hospital. The club was opened last winter as an experiment, but its popularity has greatly increased, and a very large proportion of the students now avail themselves of its advantages.

TRICHINOSIS IN SAXONY.—Reports from London, of Oct. 16, state that an outbreak of trichinosis is reported at Ermsleben, Russian Saxony. One hundred and eighty persons are suffering from the disease, and four deaths therefrom have occurred.

FOOT AND MOUTH DISEASE IN ENGLAND.—Notices in the *Gazette* show that the foot and mouth disease in England is gradually disappearing.

CHOLERA CONGRESS AT ST. PETERSBURG.—The *British Medical Journal* of September 20th, says that there is reason to believe that a Medical Congress will be held in St. Petersburg during the present month, for the purpose of discussing all matters connected with cholera. MM. Charcot and Pasteur and other European authorities are said to have promised to be present.

INTERNATIONAL SANITARY CODE.—We learn that the European powers have signified their agreement to the proposal of the Italian Government to summon a conference at Rome, with the object of making sanitary regulations, and drawing up an International Sanitary Code. Signor Mancini, Minister for Foreign Affairs, will shortly address a circular to the Powers on the subject.

CHOLERA CHEMICALLY CONSIDERED.—M. Ramon de Luna has given expression to his views on cholera at a recent meeting of the Académie des Sciences. He believes that the cause of cholera is always to be found in the atmosphere; that it exerts its action exclusively through the respiratory passages; that it is especially during the passive condition of the individual, particularly during sleep, that its incubation takes place; that the microbe or ferment acts chiefly on the blood corpuscles, preventing proper oxidation, and so leading to gradual suffocation; that the only remedy which was ascertained to do any good was the inhalation of the fumes of nitrous acid mixed with air; and that the same agent is of prophylactic value against cholera. These conclusions are given as the result of practical successful experience.—*Lancet*, Sept. 29, 1883.

THE GRESHAM LECTURES.—The Gresham Lectures, delivered in Gresham College, Basinghall Street, by Dr. E. Symes Thompson, discussed the subject of Nursing. The first lecture treated of observation and watchfulness, the administration of medicine, methods of feeding, and how to prepare peptonized foods, etc.; the second, of knowledge and judgment, the application of external remedies, and the prevention of needless suffering. The third lecture dealt with purity and impurity, the purification of house and patient, and the various forms of, and methods of employing, antiseptics. The fourth lecture was devoted to firmness

and authority, the removal of restraints during convalescence, the importance of change of air, invalid furniture, and, finally, an account of a visit to the Hygienic Exhibition at Berlin in August, 1883.—*Lancet*, Sept. 29, 1883.

QUARANTINE ON VESSELS FROM MEDITERRANEAN PORTS.—Quarantine on arrivals from Mediterranean ports has been reduced at Malta to periods ranging from four to ten days, minus the actual duration of the voyage. Arrivals from Greece are admitted to free pratique, but the quarantine regulations are still enforced against those from Egypt. In French ports, vessels from Syria are now subjected to only twenty-four hours' quarantine of observation, and at Odessa and Kertch, quarantine for vessels with clean bills of health has been reduced to three days' observation, counting from departure from Constantinople.

EPIDEMIC RELIGIOUS EXCITEMENT.—The *Journal de Ploërmel* reports a curious example of one of those outbreaks of epidemic nervous disorder which were characteristic of the Middle Ages, but are now rarely heard of. Of fifty pupils of the Girls' Congregational School of Saint Marlo des Trois Fontaines, upward of thirty-five have been attacked by a nervous disorder having all the symptoms of St. Vitus' dance. The school has been closed by order of the local authorities.—*British Med. Journal*, Aug. 18, 1883.

NEW SURFACE THERMOMETER.—M. BURQ has recently completed a new surface thermometer, made of a small ivory case, in the lower part of which is solidly encased the tube for the mercury. There is a scale, minutely divided, with a needle pointer which indicates the maximum position in a series of observations. The inventor designed it to indicate the thermic effects of metallic applications, though it will probably be a valuable aid in studying local variations of temperature.

GENEROUS RECOGNITION.—It is said that the Emperor of Brazil has given Prof. Lacerda \$20,000 for his discovery of permanganate of potassium, hypodermically injected, as an antidote for the bite of the cobra.

NEW MEDICAL ACADEMY IN SIENA.—Under the Presidency of PROF. G. MARCACCII, a new society has been formed in Siena for the advancement of medical science, under the title "Società fra i Cultori della Scienze Mediche."

MAGNESIA IN BEER.—As a custom of adding magnesia to beer to preserve it is now becoming general, a word in time from the medical profession may avert what threatens to become a danger to health. Formerly, to preserve beer, only salts of lime and the alkalies were used; these imparted harsh and soapy tastes respectively. As magnesian compounds are not so perceptible (when in beer) to the taste, their use in brewing is replacing that of lime. Pure beer itself contains more magnesia than can be taken with impunity by many constitutions, the addition of further quantities under names known to the trade as "antacid," to correct beer, "C and D," to preserve it, "concentrated Burton water" to harden brewing water, may easily increase the amount to an injurious quantity. Brewers do not inquire into the nature of the chemicals now largely used by them, and cannot be aware of their effects. It is time that they were reminded that the continual drinking in a popular dietetic of salicylic acid, magnesia, vegetable bitters, etc., is a question which concerns the public health quite as much as their own profits. Drinking-waters containing excessive quantities of magnesia are frequently condemned;

beer can disguise more, and should be closely watched. In obscure cases of purging, it will be well for the medical adviser to bear in mind the possible, but hitherto unsuspected, presence of excessive quantities of magnesia in beer.—*British Medical Journal*, September 18, 1883.

MANAGEMENT OF MEASLES.—The Board of Health of Boston have issued the following circular of recommendations for the proper management of measles:

When a case of measles occurs, put the patient in a room apart from the other inmates of the house, and allow no person to enter such room, except the nurse and physician. Have the sick chamber properly warmed, exposed to the sunlight, well aired and relieved of all unnecessary furniture and other articles which cannot be cleansed without injury.

All clothing removed from the patient, or the bed, should be at once placed in boiling water, or in a tub of disinfecting fluid—three pounds of sulphate of zinc and one and a half pounds of common salt to each ten gallons of water. Water-closets and privies in the house should be disinfected frequently with a solution of copperas—two pounds to a gallon of water. Every kind of filth in or about the house should be removed, and disinfectants freely used.

Children in the family should not attend school, or mingle with other children, until the patient has wholly recovered, and all infected articles have been disinfected.

On the recovery or death of the patient, the most thorough disinfection should follow. The room and all articles in it should be at once subjected to the fumes of burning sulphur as follows: Close the room tightly, and burn two pounds of sulphur to each thousand cubic feet of space.

After four or six hours, open the room, and expose it to free currents of air.

Anything that can be boiled without injury may be so treated. The walls and ceilings should be dry-rubbed or lime-washed, and the floors washed with some disinfecting liquid. When death occurs, the body should be immediately placed in a tight coffin, with disinfectants, and the coffin tightly and finally closed.

No public funeral should ever take place at the house where the patient has died, until the coffin has been tightly sealed, and the most thorough disinfection has taken place.

Nurses ought to be particularly careful to remove all infection from themselves and their clothing before leaving the house.—*Sanitary Engineer*, September 13, 1883.

HEALTH IN MICHIGAN.—Reports to the State Board of Health, for the week ending October 6, 1883, indicate that influenza, diphtheria, and intermittent fever have increased, and that dysentery, typho-malarial fever, pneumonia, and cholera morbus have decreased in area of prevalence.

Including reports by regular observers and others, diphtheria was reported present during the week ending October 6, and since, at twenty-six places, namely, Calumet, Coldwater, Clarence, Clam Lake, Detroit, Ensley, Grand Rapids, Ida, Jackson, Kalamazoo, Kendall, Lansing, Manistee, Manton, Monroe, Mt. Pleasant, Nashville, Newberry, Niles, Pontiac, Petersburg, Saginaw, Sault Ste Marie, Somerset, Utica, and Whitehall. Scarlet fever at twenty places: Bingham, Belvidere, Detroit, Dorr, Edmore, Fentonville, Grand Rapids, Ithaca, Jackson, Lowell, Manistee, Manton, Monroe, Mendon, Nashville, Pierson, Saginaw, Somerset, Summit, and Whitehall. Measles at four places: Charlevoix, Grand Rapids, Otsego, and Union City.

MEMORIAL TABLET TO M. THUILLIER.—A tablet commemorative of the public services of M. THUILLIER, and his untimely death of the disease whose nature and causes he had accompanied M. Pasteur to Egypt to investigate, will be placed in the Normal School at Paris, of which he was a graduate.

OBITUARY RECORD.—The death at the age of eighty-four is announced of DR. WILHELM BAUM, of the University of Göttingen. He became the senior of the medical faculty on Wöhler's decease, and had long held the chair of surgery, which is now occupied by Koenig. He was considered in Germany as one of the school of conservative surgery to which Langenbeck and Stromeyer belong.

DR. JAMES A. SEWELL, of Quebec, Dean of the Medical Faculty of Laval University, died on October 2d, aged 73. He was a graduate of Edinburgh, and had practised in Quebec for half a century.

NOTES AND QUERIES.

CORRIGENDUM.

In our issue of October 6th, page 387, second column, twenty-seventh line from bottom, for "A paper was then read by Dr. E. Bock," read "by DR. EDWARD BORCK," of St. Louis.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM OCTOBER 8 TO OCTOBER 15, 1883.

HAMMOND, JOHN F., *Colonel and Surgeon*.—Leave of absence on surgeon's certificate of disability granted April 2, 1883, extended six months on surgeon's certificate of disability.—*Par. 7, S. O. 231, A. G. O.*, October 8, 1883.

SWIFT, EBENEZER, *Lieutenant-Colonel and Assistant Medical Purveyor*.—Under the provisions of section 1 of the act of Congress approved June 30, 1882, is, by operation of law, this day retired from active service, and will proceed to his home.—*Par. 4, S. O. 231, A. G. O.*, October 8, 1883.

HARTSUFF, ALBERT, *Major and Surgeon*.—Granted leave of absence for fifteen days.—*Par. 2, S. O. 205, Department of the Missouri*, October 6, 1883.

HUNTINGTON, DAVID L., *Major and Surgeon*.—By direction of the President, will, until further orders, take charge of the office of the Surgeon-General of the Army, and perform the duties pertaining thereto.—*Par. 3, S. O. 234, A. G. O.*, October 11, 1883.

MEACHAM, FRANK, *Major and Surgeon*.—Assigned to duty at Fort Douglas, Utah.—*Par. 3, S. O. 109, Department of the Platte*, October 6, 1883.

STERNBERG, GEORGE M., *Major and Surgeon*.—Granted leave of absence for one month to date, from October 6, 1883, with permission to go beyond the limits of the Department, and to apply for extension of one month.—*Par. 3, S. O. 134, Department of California*, October 4, 1883.

CRONKHITE, H. M., *Captain and Assistant Surgeon*.—Assigned to duty at Fort D. A. Russell, Wyoming.—*Par. 3, S. O. 109, Department of the Platte*, October 6, 1883.

WEISEL, DANIEL, *Captain and Assistant Surgeon*.—Assigned to duty at Fort Fred. Steele, Wyoming.—*Par. 3, S. O. 109, Department of the Platte*, October 6, 1883.

ARTHUR, W. H., *First Lieutenant and Assistant Surgeon*.—Assigned to duty at Fort Douglass, Utah.—*Par. 3, S. O. 109, Department of the Platte*, October 6, 1883.

STRONG, NORTON, *First Lieutenant and Assistant Surgeon*.—Assigned to duty at Fort Washakie, Wyoming.—*Par. 3, S. O. 109, Department of the Platte*, October 6, 1883.

THE MEDICAL NEWS will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.

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